

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



reserve  
A 49.9  
R 31A

ARS 44-79-3  
December 1962

U. S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY

JAN 17 1963

CURRENT SERIAL RECORDS

# Report of EGG PRODUCTION TESTS

Records of Stocks  
Entered in Performance Tests  
in the United States and Canada

for the period 1961-62

Agricultural Research Service  
UNITED STATES DEPARTMENT OF AGRICULTURE

E  
b  
p  
E  
T  
h  
a  
r  
in

E  
C

Q

S

T  
T  
th  
L  
st  
st  
Ag

## FOREWORD

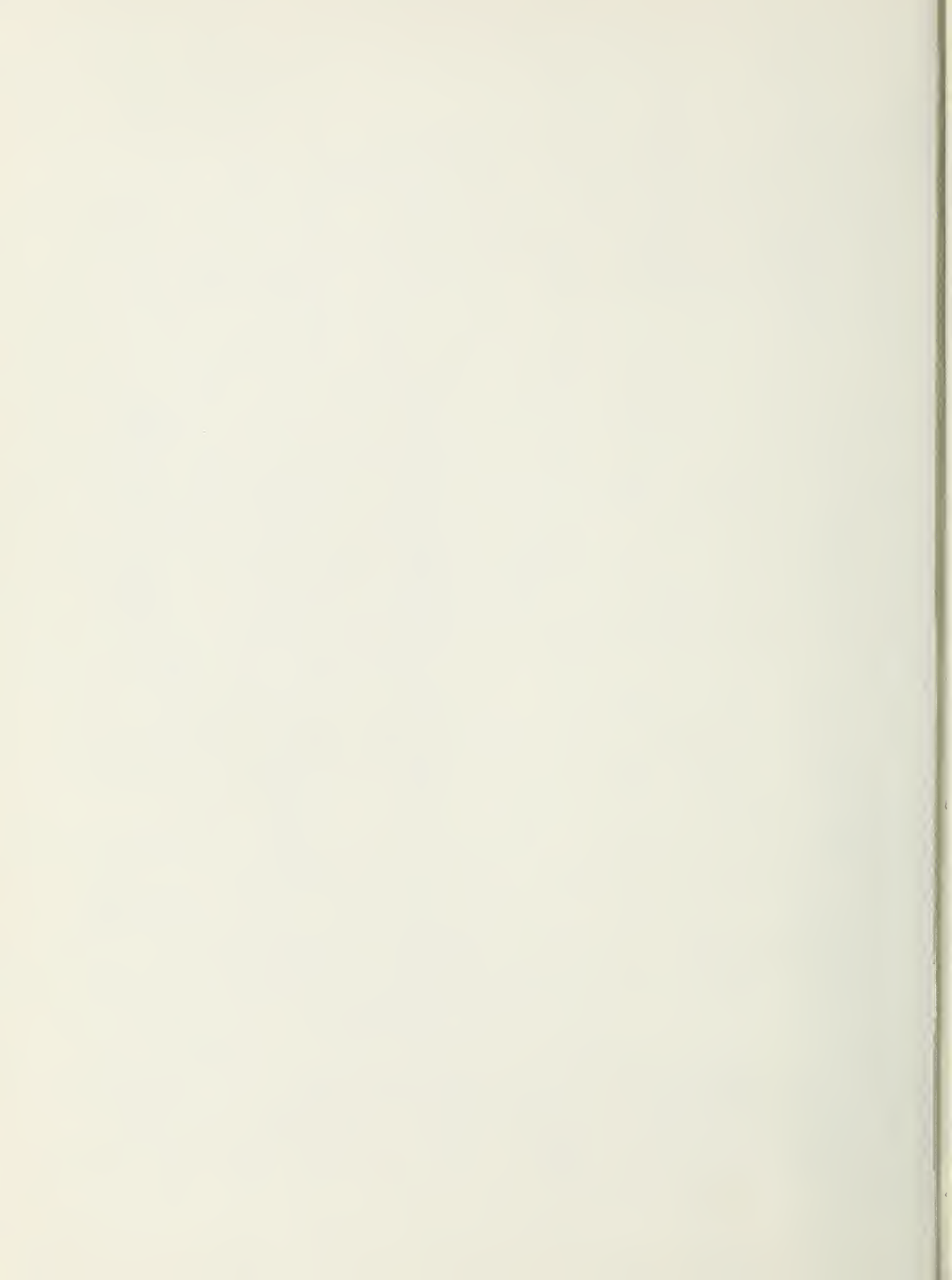
Egg Production Tests are designed to provide a reliable guide for poultrymen, hatcherymen, and breeders concerning the performance of stocks offered for sale by breeders and hatcherymen. This publication contains data on traits of economic importance compiled from results of all official Random Sample and Standard Egg Laying Tests in the United States and Canada during 1961-62.

The publication is divided into three separate categories: 1- Combined Summary, 2 - Quartile Ranking, 3 - Standard Egg Laying Tests. The first deals with Random Sample Egg Production Test data that has been treated by acceptable statistical procedures. It permits direct comparison of stocks that are entered in different tests. The second also deals with Random Sample Egg Production Test results and shows by "quartile rankings" the performance of each entry as compared to other entries in the same test. The third concerns records compiled by the Standard Egg Laying Tests.

## CONTENTS

	Page
Random Sample Egg Production Tests and Supervisors, 1961-62 .....	3
Combined Summary	
Introduction .....	4
How to Tell Whether Differences Are Real .....	4
Explanation of Income Figures .....	5
Stocks Should be Compared for All Traits .....	5
Explanation of Terms and Abbreviations .....	5
All Stocks Entered, with Regressed Mean and LSD Range for Each Trait .....	6-32
Stocks Entered in 1961-62 Random Sample Egg Laying Tests .....	33-37
Analytical Procedures .....	38-39
Adjustment Factors Used to Adjust for Test Differences .....	40-41
Analytical Data for the Traits Measured .....	42-43
Starting Date, Ending Date, Number of Entries, Pullets per Entry and Length of 1961-62 Tests .....	43
Quartile Ranking	
Introduction .....	44
List of Entrants Other than Breeder of Stock .....	44-45
Summary of Important Data for all Random Sample Egg Laying Tests .....	46-50
Quartile Rank of Entries in Random Sample Egg Production Tests .....	51-71
Standard Egg Laying Tests	
Introduction .....	72
Production Summary of Each U. S. Official Egg Laying Test for 1960-61 .....	72
Production Summaries of all Entries in U. S. Official Egg Laying Tests for 1961-62 by Breeds .....	72
All Time High Individual Records for Each Breed in all U. S. Standard Tests .....	73
All Time High Pen Records for Each Breed in all U. S. Standard Tests .....	74
Average Annual Production and Mortality for the Three Year Period Ending September 15, 1962 .....	75
Average Annual Production and Mortality for the Ten Year Period Ending September 15, 1962 .....	76

This publication is based upon recommendations of the National Committee on Random Sample Poultry Testing and the Council of American Official Poultry Tests. Information in the report was compiled by the Poultry Research Branch, Animal Husbandry Research Division, Agricultural Research Service, from data supplied by the Test Supervisors and the Council of American Official Poultry Tests. The statistical analysis for the Combined Summary was made by Biometrical Services, ARS. The publication of this report should not be construed as implying approval or endorsement by the U. S. Department of Agriculture of any of the stocks tested.



- Alberta Random Sample Egg Production Test  
R. H. McMillan, Alberta Department of Agriculture, Edmonton
- Arizona Random Sample Test  
Ernest L. Parker, Arizona State University, Tempe
- Arkansas Random Sample Commercial Egg and Controlled Environment Test, Fayetteville  
L. T. Lankford, Box 391, Little Rock
- British Columbia Random Sample Egg Production Test, Abbotsford  
W. H. Pope, B. C. Department of Agriculture, Victoria
- California Official Random Sample Egg Laying Test  
Emery A. Johnson, Rt. 3, 2718 No. 99 Highway, Modesto
- Central Random Sample Egg Production Test  
M. S. Mitchell, Poultry Division, Canada Department of Agriculture, Ottawa
- Florida Random Sample Test  
A. W. O'Steen, Chipley
- Iowa Multiple Unit Poultry Test  
LeRoy Kruskop, Iowa Poultry Association, National Plans Division Board,  
535 E. Lincolnway, Ames
- Kansas Multiple Unit Test  
M. E. Jackson, Kansas State University, Manhattan
- Minnesota Random Sample Egg Production Test, Stillwater and St. Cloud  
Robert E. Moehrle, Department of Agriculture, Dairy and Food, State Office Bldg. , St. Paul
- Missouri Official Random Sample Poultry Test  
Charles W. McElyea, Mountain Grove
- New Brunswick Random Sample Egg Production Test  
Bernard R. Bartlett, Department of Agriculture, Fredericton
- New Hampshire Multiple Unit Egg Production Test  
W. C. Skoglund, Department of Poultry Science, University of New Hampshire, Durham
- New Jersey Random Sample Egg Laying Test  
John J. Dowling, Jr., Rutgers University, New Brunswick
- Central New York Official Random Sample Poultry Test, Horseheads  
Dean R. Marble, Poultry Department, Cornell University, Ithaca
- Western New York Official Random Sample Poultry Test, Stafford  
Dean R. Marble, Poultry Department, Cornell University, Ithaca
- North Carolina Random Sample Egg Laying Test, Salisbury  
G. A. Martin, School of Agriculture, North Carolina State College, Raleigh
- Pennsylvania Random Sample Laying Test  
Paul J. Turek, Route 2, Harrisburg
- Rhode Island Random Sample Laying Test  
M. R. McClung, University of Rhode Island, Kingston
- Tennessee Random Sample Laying Test  
O. E. Goff, University of Tennessee, Knoxville
- Texas Random Sample Egg Production Test  
Bill H. Doran, Texas A & M College, College Station
- Wisconsin Random Sample Egg Production Test, Oregon  
Arnold Guthrie, Department of Agriculture, State Capitol, Madison 2



## COMBINED SUMMARY

### INTRODUCTION

This summary includes the combined results of the Random Sample Egg Production Tests conducted in the United States and Canada during 1961-62. The entries in the various tests start with a random sample of hatching eggs or chicks of the stock being tested. The samples are drawn by prescribed methods to insure that each entry is typical of the stock it represents. All entries within a test are treated the same with respect to housing, feeding, management, and disease control with the objective of avoiding differences in performance due to environment.

All tests follow these basic principles in their operation. However, there are differences between tests including climatic conditions and other environmental factors which affect the results. For this reason direct comparisons of the results of two stocks in different tests may be misleading.

The primary purpose of this summary is the presentation of test results in a manner that will support sound evaluation of all stocks tested. To accomplish this, the results of all tests are combined, by stocks, with adjustments for test differences and the use of other accepted statistical procedures. The results of these computations are published as the regressed mean of each trait for each stock.

Errors of two kinds influence the results of even the most carefully designed and operated tests. The first kind of error is the chance deviation or unavoidable "sampling error" made when a small sample of eggs or chicks represents an entry. The other kind of error is due to uncontrolled or unknown environmental differences between entries that happen in spite of all efforts to treat each entry exactly alike. The differences between the results for two entries in a single test may be due to these chance variations rather than to a real difference in the performance capabilities of the two stocks. The effect of such errors can be materially reduced by basing the comparisons on the combined results of several tests. If all entries compared were entered in the same tests, the simple averages could be utilized without adjustment.

The performance data (regressed means) reported in this summary are derived from the results reported by the individual tests. It is unlikely, however, that these means for any stock, even though entered in only one test, will coincide precisely with the performance data published by the test. The variations are due to adjustments for test differences, the number of tests entered, and the number of replicates per test. These statistical adjustments allow predictions to be made of what the average performance would have been for each stock if all stocks had been entered in all tests.

The statistical treatment applied to the test data is designed to reduce the influence of non-genetic variations but this cannot be accomplished perfectly. Consequently, estimates or predictions of performance cannot be made with absolute precision. Reliable predictions, within prescribed limitations, can be made as to whether a difference in the reported performance of two stocks represents a real difference in their performance. These predictions involve the use of the least significant difference (LSD) figures which have been computed for each trait or performance factor reported.

### HOW TO TELL WHETHER DIFFERENCES ARE REAL

The LSD represents the amount of difference in the performance of two stocks that may be due to chance. If the difference is greater than the LSD range, the odds are at least 19 in 20 that a real difference exists in the performance of the two stocks.

To facilitate use of the LSD values the "LSD Range" is shown for each stock and trait reported. The LSD Range represents the regressed mean of a stock, plus and minus the LSD (less one unit of measurement). If the regressed mean of one stock falls within the LSD Range of another stock, the two stocks are not significantly different. As an example, for the "Age at 50 Percent Production" trait, the LSD is 6 days. Thus stock 3, with a regressed mean of 175 days, has an LSD Range of 170 (175 minus 5) to 180 (175 plus 5). The regressed mean of stock 503, which is 184 days, does not fall within the LSD Range of stock 3 (170 to 180 days) and consequently is considered to be significantly different from stock 3 for this trait. However, stocks 5, 7 and 8, with regressed means of 178, 178, and 173 days, respectively, are not significantly different from stock 3 for this trait.



## EXPLANATION OF INCOME FIGURES

The "Income Over Feed and Chick Cost" figures reported in this summary represent the sales value of the eggs produced and of the hens at the end of the test minus the cost of the chicks and the feed used during the growing and laying periods. These figures may be useful in comparing the overall performance of stocks but they should not be considered as predictions of "profit" to be obtained under commercial operations. The "income" figures should be reduced by other costs, such as labor, building and equipment depreciation, vaccination, litter, interest, taxes and insurance, to approximate profits that might be expected under commercial conditions. Surveys conducted among commercial producers indicate that such costs may range from \$1.00 to \$2.00 per pullet housed.

Although the average chick price is reported for each stock, this value cannot be appropriately used to convert the "Income Over Feed and Chick Cost" figure to an income over feed cost figure. The average chick price shown is a simple unadjusted average of the prices reported by the entrant for his entries in the various tests, and is not directly comparable to chick cost included in "Income Over Feed and Chick Cost."

## STOCKS SHOULD BE COMPARED FOR ALL TRAITS

In the use of this report for the evaluation of the overall performance of the various stocks, all traits should be considered. The values reported for "Income Over Feed and Chick Cost" represent a composite of several traits combined as determined by the economic conditions of the areas in which the tests are located. The conditions under which the stock is expected to perform in commercial production may differ from those prevailing at the tests and such differences should be taken into consideration. For example, a poultryman whose local market pays unusually good premiums for large and extra large eggs should place more emphasis on egg size in his evaluation of stock than those located in areas where such premiums are not available. The local market preference for brown or white shells should also be taken into account. Traits related to interior egg quality which affect the grade are of greatest importance in areas where prices are based on quality standards.

Each person should study his local needs and conditions and then place the appropriate emphasis on the performance traits that are of greatest importance to his own situation. A productive and profitable stock for one poultryman under one set of conditions may not fit the needs of another poultryman under a different set of conditions.

A brief explanation of the statistical procedures used in computing the regressed means and the LSD values may be found on pages 38 through 43.

## EXPLANATION OF TERMS AND ABBREVIATIONS

**Stock:** A term used to identify a specific breeding combination of chickens. These breeding combinations may include pure strains, strain crosses, breed crosses, incrossbreds, or combinations thereof.

Kind of	AW	Austra White	LS	Light Sussex	BX	Crossbred
Stock:	BA	Black Australorp	NH	New Hampshire	IN	Incross
	BL	Brown Leghorn	RIR	Rhode Island Red	INX	Incrossbred
	BPR	Barred Plymouth Rock	RIW	Rhode Island White	LX	Line Cross
	CG	California Gray	WA	White Austra	PS	Pure Strain
	CR	Columbian Rock	WL	White Leghorn	SX	Strain Cross
	DW	Dominant White	WPR	White Plymouth Rock	Syn.	Synthetic

## All Stocks Entered, with Regressed Means and LSD Range for each Trait

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE	MORTALITY			
						GROWING		LAYING	
						(%)		(%)	
					(¢)	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
3	Allstate Hatchery Willmar, Minnesota	WL SX	LX 330	4	43.5	3.3	1.9 5.0	6.5 10.5	15.1
5	Ames In-Cross Des Moines, Iowa	INX	Ames 424	7	46.2	2.9	1.6 4.4	7.1 11.2	15.9
7	Ames In-Cross Des Moines, Iowa	INX	Ames 434R	6	48.4	3.1	1.8 4.7	8.6 13.0	18.0
8	Ames In-Cross Des Moines, Iowa	INX	Ames 505	4	46.3	2.7	1.5 4.2	4.5 8.0	12.1
537	Andrews, J. J. Rt. 3, Chilliwack, B. C.	CG x WL BX	Polka Dot	2	36.0	2.8	1.5 4.3	6.9 10.9	15.6
10	Anthony, Geo. M. & Sons Strausstown, Pennsylvania	WL SX	Anthony	6	38.4	3.0	1.7 4.6	7.5 11.7	16.5
503	Appleby Poultry Farm Mission City, B. C.	WL SX	Life Line	2	38.0	3.7	2.2 5.4	9.2 13.8	18.9
138	Arbor Acres Farm, Inc. Glastonbury, Connecticut	WL SX	Arbor Acres Queen	12	37.7	3.5	2.1 5.2	11.1 15.9	21.4
540	Arnold, C. T. Arborg, Manitoba	BR x (RIRxLS)	Hybred 255	2	33.5	5.9	4.0 8.0	15.1 20.5	26.4
541	Austin's Hatchery Arkona, Ontario	WL SX	Austin	1	35.0	3.3	1.9 4.9	6.5 10.4	15.1
232	Avery, C. T. & Son Colrain, Massachusetts	RIR PS	Flock Mating	2	37.0	3.9	2.4 5.7	8.0 12.3	17.2
13	Babcock Poultry Farm, Inc. Box 286, Ithaca, New York	WL SX	Bessie	8	41.8	3.2	1.8 4.8	7.8 12.0	16.9
237	Babcock Poultry Farm, Inc. Box 286, Ithaca, New York	WL SX	Bonnie	16	42.9	2.3	1.2 3.7	4.5 7.9	12.1
505	Balakshin, N. A. Rt. 3, Chilliwack, B. C.	WL SX	Balakshin	2	36.5	3.8	2.3 5.5	5.2 8.9	13.2
17	Ball Poultry Farm Owego, New York	WL SX	551	1	36.0	3.1	1.8 4.7	7.7 11.9	16.8
293	Ball Poultry Farm Owego, New York	WL SX	551A	1	38.0	3.5	2.0 5.1	8.2 12.5	17.5
259	Ball Poultry Farm Owego, New York	WL SX	#591	1	36.0	3.7	2.2 5.4	7.0 11.1	15.8
233	Ball Poultry Farm Owego, New York	WL SX	#592	1	38.0	3.3	1.9 4.9	7.4 11.5	16.3
269	Baumgartner Poultry Farm Litchfield, Minnesota	WL SX	#408	1	44.0	3.4	2.0 5.0	7.9 12.2	17.1
20	Beamsdale Farm Rt. 2, Lawndale, No. C.	WL SX	Beamsdale 66	2	39.0	4.2	2.6 6.0	5.1 8.7	13.0
22	Booth Farms & Hatchery Clinton, Missouri	INX	Booth Line 351	1	39.0	3.4	2.0 5.0	7.6 11.7	16.6

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION  (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST  (\$)		FEED PER 24 OZ. OF EGGS PRODUCED  (lbs)		EGG WEIGHT  (oz)		LARGE AND EXTRA LARGE EGGS  (%)		BODY WEIGHT  (lbs)		STOCK CODE			
		HEN HOUSED		HEN DAY															
		(No.)		(%)															
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE				
175	170	219	203	64.9	68.6	72.3	1.57	1.98	2.39	4.29	4.61	4.93	24.0	24.4	65.2	71.8	4.6	4.9	3
178	173	215	199	65.8	69.5	73.2	1.64	2.05	2.46	4.09	4.41	4.73	24.4	25.2	70.9	77.1	4.7	5.0	5
178	173	214	198	66.1	69.8	73.5	1.36	1.77	2.18	4.26	4.58	4.90	24.3	25.1	68.7	75.0	4.7	5.0	7
173	168	206	190	61.3	65.0	68.7	1.68	2.09	2.50	4.53	4.85	5.17	24.7	25.5	74.3	80.2	6.3	6.6	8
178	173	210	194	64.2	67.9	71.6	1.65	2.06	2.47	4.01	4.33	4.65	24.0	24.8	69.0	75.3	4.3	4.6	537
175	170	214	198	64.4	68.1	71.8	1.53	1.94	2.35	4.32	4.64	4.96	24.5	25.3	69.9	76.1	4.7	5.0	10
184	179	197	181	62.6	66.3	70.0	1.29	1.70	2.11	4.55	4.87	5.19	24.5	25.3	72.6	78.6	4.7	5.0	503
175	170	219	203	68.4	72.1	75.8	1.84	2.25	2.66	4.03	4.35	4.67	24.7	25.5	75.2	81.0	4.3	4.6	138
174	169	178	162	60.7	64.4	68.1	.77	1.18	1.59	5.34	5.66	5.98	24.4	25.2	67.4	73.8	6.0	6.3	540
180	175	211	195	64.7	68.4	72.1	1.66	2.07	2.48	4.22	4.54	4.86	24.5	25.3	72.9	78.9	4.5	4.8	541
179	174	215	199	65.7	69.4	73.1	1.70	2.11	2.52	4.68	5.00	5.32	24.2	25.0	69.9	76.1	6.2	6.5	232
172	167	214	198	63.9	67.6	71.3	1.80	2.21	2.62	4.12	4.44	4.76	24.4	25.2	69.4	75.6	4.5	4.8	13
170	165	233	217	68.1	71.8	75.5	2.04	2.45	2.86	3.98	4.30	4.62	24.3	25.1	68.9	75.2	4.6	4.9	237
173	168	222	206	67.0	70.7	74.4	1.77	2.18	2.59	4.05	4.37	4.69	24.2	25.0	69.3	75.6	4.6	4.9	505
174	169	215	199	65.5	69.2	72.9	1.76	2.17	2.58	4.07	4.39	4.71	24.6	25.4	73.3	79.2	4.2	4.5	17
176	171	212	196	64.2	67.9	71.6	1.63	2.04	2.45	4.23	4.55	4.87	24.7	25.5	73.4	79.4	4.4	4.7	293
175	170	213	197	63.8	67.5	71.2	1.70	2.11	2.52	4.14	4.46	4.78	24.4	25.2	71.5	77.6	4.5	4.8	259
174	169	212	196	63.7	67.4	71.1	1.60	2.01	2.42	4.17	4.49	4.81	24.3	25.1	69.8	76.0	4.6	4.9	233
175	170	212	196	64.8	68.5	72.2	1.66	2.07	2.48	4.17	4.49	4.81	24.8	25.6	74.0	79.9	4.5	4.8	269
177	172	227	211	67.4	71.1	74.8	1.88	2.29	2.70	4.15	4.47	4.79	24.4	25.2	71.0	77.1	4.2	4.5	20
175	170	210	194	63.0	66.7	70.4	1.60	2.01	2.42	4.19	4.51	4.83	24.3	25.1	68.7	75.1	4.5	4.8	22

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
230	Brender's Leghorns Ferndale, New York	WL SX	Money Maker #1	11	38.7	2.8	1.5 4.3	9.7	5.9 14.2
506	Buchanan's Poultry Ranch Haney, B. C.	WL x (WL x BA)	Kanaka White	2	36.0	3.9	2.4 5.6	11.3	7.2 16.0
291	Buck Hill Hatchery Pascoag, Rhode Island	BX	Sex Link	1	34.0	3.0	1.7 4.6	11.1	7.1 15.9
26	Bundesen Brothers Petaluma, California	CG x WL BX	Graycie	1	36.0	3.8	2.3 5.6	10.4	6.5 15.0
553	Burpee, Arthur K. Rt. 6, Woodstock, N. B.	RIR x LS BX	Burpee	1	28.0	4.2	2.6 6.0	15.7	10.9 21.1
544	Burpee, Arthur K. Rt. 6, Woodstock, N. B.	WL x (RIRxLS)	No. 1	2	32.0	4.9	3.2 6.8	12.4	8.2 17.4
554	Bustin, F. E. Rt. 2, Saint John, N. B.	RIR x LS BX	Bustin's	1	30.0	3.5	2.0 5.1	14.8	10.1 20.1
283	Cameron Leghorn Res. Fr. Beaver Springs, Penna.	WL SX	#924	1	32.0	3.3	1.9 5.0	12.2	7.9 17.1
30	Carey Farms Marion, Ohio	WL SX	Carey Nicks	1	37.0	2.5	1.3 4.0	11.1	7.0 15.8
287	Carey Farms Marion, Ohio	WL SX	3-C	1	40.0	3.7	2.2 5.4	14.4	9.8 19.6
292	Carey Farms Marion, Ohio	WL SX	E. J. 's	1	40.0	3.8	2.3 5.6	13.3	8.9 18.4
31	Cashman Leghorn Farm Webster, Kentucky	WL SX	Hi-Cash	6	44.2	4.1	2.5 5.9	12.5	8.2 17.5
304	Cashman Leghorn Farms Webster, Kentucky	WL IN	Astronauts	1	44.0	2.8	1.5 4.3	10.0	6.1 14.5
32	Childers Hatchery Santa Ana, California	CG x WL BX	Childers	1	37.0	3.2	1.8 4.8	11.2	7.1 16.0
507	Clark, H. R. Burt's Corner, N. B.	RIR x CR BX	Clark's 41	1	30.0	3.9	2.4 5.6	11.1	7.0 15.8
545	Clark, H. R. Burt's Corner, N. B.	RIR x WL BX	Clark's 45	2	31.5	3.6	2.1 5.3	14.2	9.6 19.4
550	Clark, H. R. Burt's Corner, N. B.	WL x (RIRxCR)	Clark's 541	1	33.0	4.0	2.4 5.8	14.5	9.9 19.7
508	Clark's Poultry Farm Brandon, Manitoba	RIR x (LSxRIR)	Paymaster 101	1	32.0	3.3	1.9 4.9	11.3	7.2 16.0
34	Colonial Poultry Farms Pleasant Hill, Missouri	WL PS	Best Egg Grade	1	33.0	2.8	1.5 4.3	11.2	7.2 16.0
35	Colonial Poultry Farms Pleasant Hill, Missouri	WL IN	True Line 365	7	43.4	5.1	3.3 7.1	15.5	10.7 20.8
289	Colonial Poultry Farms Pleasant Hill, Missouri	WL IN	True Line 365B	2	43.5	4.2	2.6 6.1	12.2	7.9 17.1

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



AGE AT 50% PRODUCTION  (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST		FEED PER 24 OZ. OF EGGS PRODUCED		EGG WEIGHT		LARGE AND EXTRA LARGE EGGS		BODY WEIGHT		STOCK CODE
		HEN HOUSED		HEN DAY												
		RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	
172	197	63.6	1.72	4.17	24.9	70.5	4.1									
177	182	213	229	67.3	71.0	2.13	2.54	4.49	4.81	25.3	25.7	76.8	82.4	4.4	4.7	230
170	175	224	240	70.8	74.5	2.33	2.74	4.22	4.54	25.0	25.4	69.6	75.9	4.8	5.1	506
172	177	214	230	67.4	71.1	2.07	2.48	4.78	5.10	25.6	26.0	73.4	79.4	6.4	6.7	291
173	178	223	239	69.8	73.5	2.09	2.50	4.59	4.91	24.9	25.3	69.5	75.8	5.2	5.5	26
176	181	183	199	62.6	66.3	1.64	2.05	5.19	5.51	25.0	25.4	72.3	78.3	6.3	6.6	553
174	179	206	222	67.6	71.3	2.00	2.41	4.64	4.96	25.3	25.7	74.3	80.1	5.1	5.4	544
177	182	191	207	63.8	67.5	1.71	2.12	5.09	5.41	25.2	25.6	73.5	79.5	5.8	6.1	554
174	179	224	240	70.8	74.5	2.38	2.79	4.38	4.70	25.0	25.4	73.5	79.4	4.6	4.9	283
177	182	203	219	65.5	69.2	1.89	2.30	4.58	4.90	25.3	25.7	72.8	78.8	4.6	4.9	30
176	181	207	223	66.8	70.5	1.91	2.32	4.67	4.99	25.0	25.4	74.0	79.9	4.6	4.9	287
178	183	198	214	64.4	68.1	1.58	1.99	4.91	5.23	25.1	25.5	74.0	79.9	4.6	4.9	292
173	178	227	243	73.3	77.0	2.32	2.73	4.24	4.56	24.4	24.8	64.4	70.9	4.7	5.0	31
175	180	222	238	69.8	73.5	2.25	2.66	4.36	4.68	24.6	25.0	67.8	74.2	4.6	4.9	304
173	178	227	243	71.2	74.9	2.26	2.67	4.48	4.80	25.0	25.4	70.6	76.8	5.3	5.6	32
178	183	192	208	63.2	66.9	1.64	2.05	5.20	5.52	25.2	25.6	73.8	79.8	5.8	6.1	507
179	184	204	220	67.3	71.0	1.93	2.34	4.73	5.05	24.7	25.1	67.3	73.7	5.8	6.1	545
174	179	206	222	67.9	71.6	1.97	2.38	4.65	4.97	25.0	25.4	70.6	76.8	6.0	6.3	550
175	180	217	233	69.8	73.5	2.09	2.50	4.75	5.07	25.0	25.4	72.3	78.3	5.7	6.0	508
175	180	216	232	68.8	72.5	2.16	2.57	4.44	4.76	24.9	25.3	71.0	77.2	4.5	4.8	34
171	176	210	226	68.5	72.2	1.94	2.35	4.46	4.78	24.9	25.3	70.1	76.3	4.5	4.8	35
173	178	217	233	69.0	72.7	2.10	2.51	4.40	4.72	25.1	25.5	73.0	79.0	4.5	4.8	289

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING		LAYING	
						(%)		(%)	
						RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
546	Co-op Hatcheries Edmonton, Alberta	NH x WL BX	Cross	1	38.0	3.2	4.8	12.1	16.9
37	Cornell University Ithaca, New York	WL PS	Random Bred	12	41.9	3.4	5.1	10.2	14.8
510	Couvoir Co-Operatif St. Augustin, Quebec	WL SX	Corvette	4	38.5	3.3	4.9	13.0	18.0
542	Couvoir Co-Operatif Ste. Martine, Quebec	WL SX	La Chateauguay	1	35.0	3.9	5.6	11.6	16.4
511	Dawson, Ivan B. Central Bedeque, P. E. I.	WL x (WLxBR)	Series 1000	1	38.0	3.5	5.2	13.0	18.0
45	DeKalb Agricultural Assoc. Sycamore, Illinois	INX	DeKalb 101	2	56.0	2.9	4.4	9.6	14.1
48	DeKalb Agricultural Assoc. Sycamore, Illinois	INX	DeKalb 131	10	53.9	1.8	3.1	6.8	10.7
277	DeKalb Agricultural Assoc. Sycamore, Illinois	INX	DeKalb 151	7	56.0	2.9	4.4	8.6	12.9
256	Del Rio Farm Mesa, Arizona	RIR PS	Del Rio	1	45.0	3.7	5.4	12.0	16.9
51	Demler Farms Anaheim, California	WL SX	Demler	3	35.3	4.1	6.0	10.9	15.6
52	Demler Farms Anaheim, California	SYNxWL BX	Demler Kross	3	36.0	2.7	4.2	9.8	14.3
254	Demler Farms Anaheim, California	INX	Demler IBX	7	42.3	3.1	4.7	10.7	15.4
513	deZeeuw Leghorn Breeder South Edmonton, Alberta	WL SX	601	1	37.0	2.8	4.4	11.7	16.6
514	deZeeuw Leghorn Breeder South Edmonton, Alberta	WL SX	752	3	37.3	4.3	6.1	12.3	17.2
270	Dryden Farms, Inc. Box 951, Modesto, Calif.	CG x WL BX	Gray X Leghorn	2	40.0	2.7	4.2	11.0	15.7
271	Dryden Farms, Inc. Box 951, Modesto, Calif.	WL SX	SX 60	3	38.0	3.1	4.7	9.9	14.4
55	Eby's Poultry Farm Carrollton, Texas	WL SX	Grade #1	2	35.0	2.6	4.1	9.0	13.3
59	Erath Egg Farm Stephenville, Texas	WL SX	Erath Str. X	3	37.3	2.9	4.4	9.3	13.7
517	Evans, F. H. Abbotsford, B. C.	WL SX	Echo Leghorns	3	32.7	3.9	5.7	13.2	18.3
518	Fisher Poultry Farm Ayton, Ontario	WL SX	103	2	35.5	3.0	4.6	10.2	14.8
60	Fletcher Hatchery Concord, North Carolina	WL SX	FX 100	1	38.0	4.3	6.2	10.9	15.5

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION  (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST  (\$)		FEED PER 24 OZ. OF EGGS PRODUCED  (lbs)		EGG WEIGHT  (oz)		LARGE AND EXTRA LARGE EGGS  (%)		BODY WEIGHT  (lbs)		STOCK CODE
		HEN HOUSED		HEN DAY												
		(No.)		(%)												
RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	RE- GRESSED MEAN	LSD * RANGE	
172	167 177	198	182 214	64.8	61.1 68.5	1.60	1.19 2.01	5.19	4.87 5.51	24.8	24.4 25.2	67.7	60.8 74.0	5.1	4.8 5.4	546
176	171 181	215	199 231	67.6	63.9 71.3	1.89	1.48 2.30	4.63	4.31 4.95	24.0	23.6 24.4	58.7	51.6 65.5	4.6	4.3 4.9	37
175	170 180	198	182 214	65.5	61.8 69.2	1.88	1.47 2.29	4.59	4.27 4.91	25.5	25.1 25.9	76.3	69.9 82.0	4.7	4.4 5.0	510
176	171 181	207	191 223	67.0	63.3 70.7	2.01	1.60 2.42	4.57	4.25 4.89	25.3	24.9 25.7	74.6	68.1 80.4	4.6	4.3 4.9	542
174	169 179	212	196 228	68.5	64.8 72.2	1.98	1.57 2.39	4.55	4.23 4.87	24.6	24.2 25.0	67.9	61.0 74.2	4.9	4.6 5.2	511
172	167 177	221	205 237	68.8	65.1 72.5	2.16	1.75 2.57	4.36	4.04 4.68	25.0	24.6 25.4	72.5	65.9 78.5	4.5	4.2 4.8	45
167	162 172	236	220 252	71.8	68.1 75.5	2.44	2.03 2.85	4.15	3.83 4.47	24.5	24.1 24.9	66.8	59.9 73.2	4.4	4.1 4.7	48
172	167 177	223	207 239	68.7	65.0 72.4	2.33	1.92 2.74	4.19	3.87 4.51	25.1	24.7 25.5	73.5	67.0 79.5	4.1	3.8 4.4	277
176	171 181	207	191 223	66.5	62.8 70.2	1.82	1.41 2.23	4.85	4.53 5.17	25.0	24.6 25.4	73.1	66.6 79.1	5.7	5.4 6.0	256
171	166 176	214	198 230	67.6	63.9 71.3	2.02	1.61 2.43	4.62	4.30 4.94	24.7	24.3 25.1	69.0	62.2 75.3	4.4	4.1 4.7	51
172	167 177	219	203 235	68.7	65.0 72.4	2.05	1.64 2.46	4.52	4.20 4.84	24.8	24.4 25.2	68.7	61.9 75.0	5.0	4.7 5.3	52
172	167 177	218	202 234	68.1	64.4 71.8	2.09	1.68 2.50	4.44	4.12 4.76	24.9	24.5 25.3	71.2	64.5 77.3	4.6	4.3 4.9	254
174	169 179	214	198 230	69.3	65.6 73.0	1.94	1.53 2.35	4.67	4.35 4.99	24.6	24.2 25.0	67.0	60.1 73.4	4.7	4.4 5.0	513
175	170 180	212	196 228	69.7	66.0 73.4	2.08	1.67 2.49	4.48	4.16 4.80	24.7	24.3 25.1	68.4	61.5 74.7	4.5	4.2 4.8	514
171	166 176	221	205 237	69.0	65.3 72.7	2.22	1.81 2.63	4.34	4.02 4.66	25.2	24.8 25.6	72.2	65.6 78.3	5.1	4.8 5.4	270
180	175 185	215	199 231	68.9	65.2 72.6	2.21	1.80 2.62	4.43	4.11 4.75	25.1	24.7 25.5	75.0	68.6 80.9	4.7	4.4 5.0	271
171	166 176	220	204 236	67.7	64.0 71.4	2.22	1.81 2.63	4.44	4.12 4.76	24.5	24.1 24.9	67.4	60.5 73.8	4.4	4.1 4.7	55
178	173 183	215	199 231	67.9	64.2 71.6	2.13	1.72 2.54	4.49	4.17 4.81	25.4	25.0 25.8	74.9	68.4 80.7	4.3	4.0 4.6	59
181	176 186	214	198 230	71.7	68.0 75.4	2.07	1.66 2.48	4.54	4.22 4.86	24.9	24.5 25.3	72.8	66.2 78.8	5.1	4.8 5.4	517
174	169 179	225	209 241	70.1	66.4 73.8	2.33	1.92 2.74	4.35	4.03 4.67	24.8	24.4 25.2	70.9	64.3 77.1	4.5	4.2 4.8	518
176	171 181	211	195 227	67.6	63.9 71.3	2.03	1.62 2.44	4.60	4.28 4.92	24.8	24.4 25.2	70.6	63.9 76.8	4.4	4.1 4.7	60

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
245	Forsgate Farms Jamesburg, New Jersey	WL SX	FF 166	1	37.0	3.2	1.9 4.8	10.4	6.5 15.1
246	Forsgate Farms Jamesburg, New Jersey	WL SX	FF 160	1	37.0	3.6	2.1 5.3	11.1	7.1 15.9
258	Forsgate Farms Jamesburg, New Jersey	WL PS	Forsgate	2	37.0	2.4	1.3 3.9	12.3	8.1 17.3
65	Garber Poultry Breeding Fr. Modesto, California	CG x WL BX	Garber	1	37.0	3.2	1.8 4.8	8.9	5.3 13.3
66	Garber Poultry Breeding Fr. Modesto, California	WL SX	G 200	1	37.0	3.2	1.8 4.8	8.1	4.7 12.3
253	Garber Poultry Breeding Fr. Modesto, California	WL SX	G 300	1	35.0	3.1	1.8 4.7	11.1	7.1 15.9
281	Garber Poultry Breeding Fr. Modesto, California	WL SX	G 400	2	36.0	3.5	2.0 5.1	11.9	7.7 16.7
69	Garrison, Earl W. Bridgeton, New Jersey	RIR x WR BX	Golden Sex Link	1	32.0	3.5	2.1 5.2	14.5	9.9 19.7
255	Garrison, Earl W. Bridgeton, New Jersey	WL SX	Garrison X 300	1	36.0	2.5	1.3 4.0	9.8	6.0 14.3
70	Gasson's Poultry Farm Versailles, Ohio	WL SX	G 33	3	40.0	3.3	1.9 4.9	8.9	5.3 13.2
72	Ghostley's Poultry Farm Anoka, Minnesota	WL SX	Ghostley Pearl	15	43.0	3.6	2.1 5.3	9.5	5.7 13.9
296	Goetz, Eugene Jackson, New Jersey	WL LS	Goetz	1	36.0	3.0	1.7 4.5	12.0	7.8 16.9
243	Good's Poultry Farm Rt. 4, Indiana, Penna.	WL SX	Good's	1	33.0	3.5	2.1 5.2	11.1	7.1 15.9
552	Goodine, Gerald Lower Southampton, N. B.	(RIR x NH) x WL	Goodine	1	30.0	4.0	2.5 5.8	12.0	7.8 16.9
75	Great Plains Hatcheries Effingham, Illinois	RIR PS	Egg Master	1	33.0	3.6	2.2 5.4	11.2	7.2 16.0
76	Great Plains Hatcheries Effingham, Illinois	BX	Golden Cross	1	33.0	2.8	1.5 4.3	11.2	7.2 16.0
543	Groupe Maska St. Hyacinthe, Quebec	WL SX	Corvette 303	1	39.0	3.2	1.8 4.8	11.8	7.6 16.6
520	Groupe Oka Oka Two Mountains, Quebec	WL SX	Oka 39	1	38.0	2.3	1.2 3.7	10.8	6.8 15.4
80	Hansen's Leghorn City Puyallup, Washington	WL SX	Criss Cross H 25	8	39.9	3.3	1.9 4.9	10.8	6.8 15.4
82	Hansen's Leghorn City Puyallup, Washington	WL SX	Criss Cross 61	1	40.0	3.0	1.7 4.6	11.0	6.9 15.7
83	Hansen's, P., Poultry Br. Fr. Fresno, California	AW BX	One Grade	1	36.0	2.5	1.3 4.0	9.6	5.9 14.1

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST		FEED PER 24 OZ. OF EGGS PRODUCED		EGG WEIGHT		LARGE AND EXTRA LARGE EGGS		BODY WEIGHT		STOCK CODE
		HEN HOUSED		HEN DAY												
(Days)		(No.)		(%)		(\$)		(lbs)		(oz)		(%)		(lbs)		
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	
179	174	221	205	69.5	65.8	2.28	1.87	4.43	4.11	25.0	24.6	73.1	66.5	4.3	4.0	245
184	237	237	237	73.2	73.2	2.69	2.69	4.75	4.75	25.4	25.4	79.1	79.1	4.6	4.6	
174	169	219	203	69.4	65.7	2.23	1.82	4.43	4.11	24.9	24.5	72.5	65.9	4.4	4.1	246
179	235	235	235	73.1	73.1	2.64	2.64	4.75	4.75	25.3	25.3	78.6	78.6	4.7	4.7	
178	173	210	194	68.9	65.2	2.07	1.66	4.51	4.19	25.1	24.7	74.7	68.3	4.3	4.0	258
183	226	226	226	72.6	72.6	2.48	2.48	4.83	4.83	25.5	25.5	80.5	80.5	4.6	4.6	
169	164	225	209	69.7	66.0	2.24	1.83	4.30	3.98	25.5	25.1	73.4	66.8	5.0	4.7	65
174	241	241	241	73.4	73.4	2.65	2.65	4.62	4.62	25.9	25.9	79.3	79.3	5.3	5.3	
173	168	224	208	69.3	65.6	2.33	1.92	4.37	4.05	24.8	24.4	70.5	63.8	4.6	4.3	66
178	240	240	240	73.0	73.0	2.74	2.74	4.69	4.69	25.2	25.2	76.7	76.7	4.9	4.9	
174	169	221	205	69.5	65.8	2.19	1.78	4.52	4.20	25.0	24.6	71.1	64.5	4.4	4.1	253
179	237	237	237	73.2	73.2	2.60	2.60	4.84	4.84	25.4	25.4	77.3	77.3	4.7	4.7	
172	167	223	207	70.1	66.4	2.31	1.90	4.37	4.05	25.2	24.8	74.8	68.4	4.6	4.3	281
177	239	239	239	73.8	73.8	2.72	2.72	4.69	4.69	25.6	25.6	80.7	80.7	4.9	4.9	
180	175	202	186	66.3	62.6	1.80	1.39	4.96	4.64	26.4	26.0	82.1	76.4	6.4	6.1	69
185	218	218	218	70.0	70.0	2.21	2.21	5.28	5.28	26.8	26.8	87.2	87.2	6.7	6.7	
178	173	217	201	68.4	64.7	2.15	1.74	4.40	4.08	24.6	24.2	68.5	61.7	3.9	3.6	255
183	233	233	233	72.1	72.1	2.56	2.56	4.72	4.72	25.0	25.0	74.9	74.9	4.2	4.2	
174	169	227	211	71.1	67.4	2.40	1.99	4.29	3.97	24.6	24.2	70.1	63.4	4.2	3.9	70
179	243	243	243	74.8	74.8	2.81	2.81	4.61	4.61	25.0	25.0	76.3	76.3	4.5	4.5	
177	172	217	201	69.1	65.4	2.15	1.74	4.48	4.16	24.9	24.5	72.0	65.4	4.5	4.2	72
182	233	233	233	72.8	72.8	2.56	2.56	4.80	4.80	25.3	25.3	78.1	78.1	4.8	4.8	
176	171	222	206	70.5	66.8	2.33	1.92	4.33	4.01	24.9	24.5	71.6	65.0	4.2	3.9	296
181	238	238	238	74.2	74.2	2.74	2.74	4.65	4.65	25.3	25.3	77.7	77.7	4.5	4.5	
174	169	218	202	68.8	65.1	2.13	1.72	4.56	4.24	25.0	24.6	71.8	65.1	4.7	4.4	243
179	234	234	234	72.5	72.5	2.54	2.54	4.88	4.88	25.4	25.4	77.9	77.9	5.0	4.7	
177	172	197	181	64.9	61.2	1.79	1.38	5.10	4.78	25.4	25.0	75.3	68.9	5.5	5.2	552
182	213	213	213	68.6	68.6	2.20	2.20	5.42	5.42	25.8	25.8	81.1	81.1	5.8	5.5	
176	171	212	196	67.7	64.0	2.02	1.61	4.75	4.43	25.1	24.7	73.5	67.0	5.8	5.5	75
181	228	228	228	71.4	71.4	2.43	2.43	5.07	5.07	25.5	25.5	79.4	79.4	6.1	6.1	
176	171	214	198	68.0	64.3	2.18	1.77	4.62	4.30	25.6	25.2	77.3	71.0	5.8	5.5	76
181	230	230	230	71.7	71.7	2.59	2.59	4.94	4.94	26.0	26.0	82.8	82.8	6.1	6.1	
177	172	195	179	63.4	59.7	1.82	1.41	4.76	4.44	25.4	25.0	75.7	69.3	4.5	4.2	543
182	211	211	211	67.1	67.1	2.23	2.23	5.08	5.08	25.8	25.8	81.5	81.5	4.8	4.8	
174	169	215	199	68.3	64.6	2.07	1.66	4.56	4.24	24.7	24.3	68.7	61.9	4.9	4.6	520
179	231	231	231	72.0	72.0	2.48	2.48	4.88	4.88	25.1	25.1	75.0	75.0	5.2	5.2	
174	169	212	196	67.4	63.7	1.86	1.45	4.64	4.32	24.6	24.2	66.8	59.9	4.7	4.4	80
179	228	228	228	71.1	71.1	2.27	2.27	4.96	4.96	25.0	25.0	73.2	73.2	5.0	5.0	
176	171	210	194	66.5	62.8	1.95	1.54	4.61	4.29	24.5	24.1	64.4	57.4	4.7	4.4	82
181	226	226	226	70.2	70.2	2.36	2.36	4.93	4.93	24.9	24.9	71.0	71.0	5.0	5.0	
173	168	217	201	68.4	64.7	2.00	1.59	4.62	4.30	25.2	24.8	73.4	66.9	5.1	4.8	83
178	233	233	233	72.1	72.1	2.41	2.41	4.94	4.94	25.6	25.6	79.4	79.4	5.4	5.4	

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE	MORTALITY			
						GROWING		LAYING	
						(%)		(%)	
					(¢)	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
84	Hanson, J. A. & Son Corvallis, Oregon	WL SX	Super Nick	2	40.0	2.9	1.6 4.4	9.8 14.4	19.6
225	Harco Orchards & Plty. Fr. South Easton, Massachusetts	RIRxBPR BX	Sex Link	5	38.6	3.0	1.7 4.6	5.8 9.6	14.1
86	Hardy, C. Nelson & Son Essex, Massachusetts	RIRxBPR BX	Sex Link	1	34.0	3.1	1.7 4.6	7.5 11.7	16.5
88	Heisdorf & Nelson Farms Kirkland, Washington	WL SX	H&N Nick Chick	18	43.4	2.5	1.3 4.0	3.3 6.3	10.1
252	Heisdorf & Nelson Farms Kirkland, Washington	WL SX	H&N Mark II	8	43.4	2.2	1.1 3.6	5.7 9.4	13.9
275	Heisdorf & Nelson Farms Kirkland, Washington	SYN x WL BX	Breed Cross	1	33.0	2.5	1.3 4.0	4.7 8.2	12.3
279	Hill Top Poultry Farm Hawley, Pennsylvania	WL SX	285 A	1	34.0	3.1	1.8 4.7	6.5 10.4	15.0
91	Hogsett Poultry Breeding Fr. Pomona, California	CG x WL BX	Hogsett	1	40.0	2.5	1.3 4.0	8.1 12.3	17.3
92	Honegger Breeder Hatchery Forrest, Illinois	WL SX	Honegger Layer	15	43.4	2.6	1.4 4.1	5.7 9.5	13.9
93	Honegger Breeder Hatchery Forrest, Illinois	WL SX	Honegger Layer #62	3	45.3	2.9	1.6 4.4	6.8 10.8	15.5
288	Honegger Breeder Hatchery Forrest, Illinois	WL SX	H-562	1	42.2	3.1	1.7 4.7	6.5 10.4	15.1
276	Hubbard Farms Walpole, New Hampshire	BX	Comet	4	36.0	3.7	2.3 5.5	8.5 12.9	17.9
99	Hy-Line Poultry Farm Des Moines, Iowa	INX	934 C	6	53.2	1.7	.8 2.9	5.8 9.5	14.0
240	Hy-Line Poultry Farm Des Moines, Iowa	INX	934 H	22	55.6	2.0	1.0 3.3	4.1 7.4	11.4
286	Hy-Line Poultry Farm Des Moines, Iowa	INX	950	2	54.5	2.9	1.6 4.5	6.4 10.3	14.9
101	Ideal Hatchery & Plty. Fr. Cameron, Texas	WL SX	H-3-W	15	37.9	3.0	1.7 4.5	6.8 10.8	15.5
303	Ideal Hatchery & Plty. Fr. Cameron, Texas	WL SX	Ideal Cross	3	37.0	2.6	1.4 4.1	8.7 13.0	18.1
285	Kahn, Max Toms River, New Jersey	WL SX	Kahn	1	36.0	3.4	2.0 5.1	7.0 11.1	15.8
108	Kerr, Dr., Hatcheries Minneota, Minnesota	WL IN	409 C	1	44.0	2.8	1.5 4.3	8.6 13.0	18.0
109	Keystone Poultry Br. Fr. Ephrata, Pennsylvania	WL SX	Park's Keystone	2	38.5	2.8	1.5 4.3	4.5 7.9	12.0
110	Kimber Farms, Inc. Fremont, California	WL SX	K 137	15	45.2	1.9	.9 3.1	4.4 7.8	11.9

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION		EGG PRODUCTION				INCOME OVER FEEO AND CHICK COST		FEEO PER 24 OZ. OF EGGS PRODUCED		EGG WEIGHT		LARGE AND EXTRA LARGE EGGS		BODY WEIGHT		STOCK CODE
		HEN HOUSEO		HEN OAY												
(Days)		(No.)		(%)		(\$)		(lbs)		(oz)		(%)		(lbs)		
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	
174	169 179	199	215	65.1	61.4 68.8	1.62	1.21 2.03	4.76	4.44 5.08	24.3	23.9 24.7	61.8	54.8 68.5	4.5	4.2 4.8	84
169	164 174	223	239	69.1	65.4 72.8	2.46	2.05 2.87	4.65	4.33 4.97	25.7	25.3 26.1	79.5	73.4 84.8	6.4	6.1 6.7	225
176	171 181	207	223	66.4	62.7 70.1	2.27	1.86 2.68	4.78	4.46 5.10	25.8	25.4 26.2	80.3	74.3 85.5	6.3	6.0 6.6	86
169	164 174	234	250	71.2	67.5 74.9	2.38	1.97 2.79	4.35	4.03 4.67	24.5	24.1 24.9	67.4	60.6 73.8	4.5	4.2 4.8	88
174	169 179	220	236	69.7	66.0 73.4	2.19	1.78 2.60	4.43	4.11 4.75	25.2	24.8 25.6	72.8	66.2 78.8	4.5	4.2 4.8	252
169	164 174	232	248	70.9	67.2 74.6	2.35	1.94 2.76	4.41	4.09 4.73	25.4	25.0 25.8	73.9	67.4 79.8	5.1	4.8 5.4	275
176	171 181	213	229	67.6	63.9 71.3	2.09	1.68 2.50	4.58	4.26 4.90	25.0	24.6 25.4	73.2	66.6 79.1	4.4	4.1 4.7	279
173	168 178	220	236	69.9	66.2 73.6	2.04	1.63 2.45	4.55	4.23 4.87	25.0	24.6 25.4	70.5	63.8 76.7	5.4	5.1 5.7	91
175	170 180	226	242	70.8	67.1 74.5	2.36	1.95 2.77	4.30	3.98 4.62	24.8	24.4 25.2	70.1	63.3 76.3	4.4	4.1 4.7	92
172	167 177	226	242	71.1	67.4 74.8	2.27	1.86 2.68	4.35	4.03 4.67	24.3	23.9 24.7	65.4	58.5 71.9	4.7	4.4 5.0	93
174	169 179	221	237	69.3	65.6 73.0	2.18	1.77 2.59	4.47	4.15 4.79	24.6	24.2 25.0	67.9	61.1 74.3	4.5	4.2 4.8	288
171	166 176	221	237	70.0	66.3 73.7	2.26	1.85 2.67	4.68	4.36 5.00	24.9	24.5 25.3	71.7	65.1 77.8	5.7	5.4 6.0	276
171	166 176	235	251	72.4	68.7 76.1	2.51	2.10 2.92	4.11	3.79 4.43	25.0	24.6 25.4	72.1	65.5 78.2	4.1	3.8 4.4	99
170	165 175	238	254	72.9	69.2 76.6	2.50	2.09 2.91	4.18	3.86 4.50	24.9	24.5 25.3	71.4	64.8 77.6	4.2	3.9 4.5	240
171	166 176	217	233	67.9	64.2 71.6	2.07	1.66 2.48	4.36	4.04 4.68	25.0	24.6 25.4	72.3	65.7 78.4	4.4	4.1 4.7	286
176	171 181	218	234	69.5	65.8 73.2	2.24	1.83 2.65	4.40	4.08 4.72	25.2	24.8 25.6	75.5	69.1 81.3	4.4	4.1 4.7	101
178	173 183	219	235	70.9	67.2 74.6	2.22	1.81 2.63	4.43	4.11 4.75	24.7	24.3 25.1	69.9	63.1 76.1	4.5	4.2 4.8	303
176	171 181	223	239	69.6	65.9 73.3	2.23	1.82 2.64	4.53	4.21 4.85	25.2	24.8 25.6	72.9	66.3 78.9	5.6	5.3 5.9	285
173	168 178	220	236	69.6	65.9 73.3	2.22	1.81 2.63	4.37	4.05 4.69	24.9	24.5 25.3	70.6	63.9 76.8	4.4	4.1 4.7	108
178	173 183	214	230	68.0	64.3 71.7	2.21	1.80 2.62	4.52	4.20 4.84	25.4	25.0 25.8	76.8	70.5 82.4	4.6	4.3 4.9	109
171	166 176	227	243	69.8	66.1 73.5	2.40	1.99 2.81	4.31	3.99 4.63	25.2	24.8 25.6	74.9	68.5 80.8	4.5	4.2 4.8	110

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
111	Kimber Farms, Inc. Fremont, California	WL SX	K 141	1	44.0	2.5	1.3 4.0	6.3 10.2	14.7
112	Kimber Farms, Inc. Fremont, California	WL SX	K 155	9	44.0	2.2	1.1 3.6	5.3 9.0	13.3
263	Kingstowne Poultry Farm N. Kingston, Rhode Island	RIR PS	Kingstowne	1	35.0	3.5	2.0 5.1	8.7 13.0	18.1
227	Klongland Hatchery Stoughton, Wisconsin	CG x WL BX	K Cross	1	35.0	3.2	1.8 4.8	7.8 12.1	17.0
299	Kruger's Poultry Br. Farm Dinuba, California	RIR x WL BX	Egg Champ	1	38.0	3.7	2.2 5.4	7.6 11.8	16.6
521	Lambert, M. Bright, Ontario	RIR x CR BX	Gold Cross	1	30.0	3.0	1.7 4.5	6.6 10.5	15.2
117	Lawton, A. C. & Sons Foxboro, Massachusetts	RIR x WPR BX	Buff Sex Link	3	35.7	2.8	1.5 4.3	3.5 6.6	10.4
235	Leader, Guy A. & Sons Rt. 2, York, Pennsylvania	WL SX	8X	1	37.0	3.5	2.1 5.2	8.6 13.0	18.1
278	Leader, Guy A. & Sons Rt. 2, York, Pennsylvania	WL SX	10X	2	39.5	4.1	2.5 5.9	9.2 13.7	18.8
229	Leader, Guy A. & Sons Rt. 2, York, Pennsylvania	WL SX	14X	1	39.0	3.6	2.1 5.3	8.7 13.1	18.2
522	Lone Pine Farm Berwick, Nova Scotia	RIR x LS BX	Lone Pine	1	29.0	3.7	2.2 5.4	7.9 12.1	17.0
124	Lux Leghorn Land Farms Hopkinton, Iowa	WL SX	H-D-6	3	41.3	2.1	1.1 3.5	6.0 9.8	14.3
551	MacDonald, C. E. Rt. 4, Cody's, N. B.	RIR x (LSxRIR)	MacDonald	1	28.0	4.0	2.4 5.7	9.2 13.7	18.8
525	Manitoba ROP Hatchery Winnipeg, Manitoba	WL SX	Keyline 110	2	41.0	4.5	2.9 6.4	11.5 16.4	21.9
539	Manitoba ROP Hatchery Winnipeg, Manitoba	WL SX	Keyline 110A	1	41.0	3.2	1.8 4.8	7.9 12.1	17.0
524	Manitoba ROP Hatchery Winnipeg, Manitoba	BR x LS BX	Keyline 230	1	29.0	5.3	3.5 7.4	14.6 20.0	25.8
294	Maple Dale Hatchery Austin, Minnesota	WL SX	#253	1	37.0	2.9	1.6 4.4	7.2 11.3	16.0
126	Mathews Poultry Farm Burlington, Wisconsin	WL SX	M 138	1	41.0	3.6	2.1 5.3	7.3 11.4	16.1
549	McIsaac, J. Donald East Florenceville, N. B.	WL SX	Electric	1	33.0	3.0	1.7 4.6	8.5 12.9	17.9
548	McIsaac, J. Donald East Florenceville, N. B.	RIR x WL BX	Electric 220	1	33.0	3.5	2.0 5.1	7.9 12.1	17.0
133	Merryknoll Farms Attleboro, Massachusetts	RIR x BPR BX	Merryknoll 400	1	38.0	2.7	1.5 4.2	6.9 10.9	15.6

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION  (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST  (\$)		FEED PER 24 OZ. OF EGGS PRODUCED  (lbs)		EGG WEIGHT  (oz)		LARGE AND EXTRA LARGE EGGS  (%)		BODY WEIGHT  (lbs)		STOCK CODE
		HEN HOUSED		HEN DAY												
		(No.)		(%)												
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	
171	166 176	222	206 238	65.1 68.8	72.5	1.81 2.22	2.63	4.05 4.37	4.69	24.1 24.5	24.9	61.9 68.7	75.0	4.2 4.5	4.8	111
169	164 174	232	216 248	67.3 71.0	74.7	1.92 2.33	2.74	4.05 4.37	4.69	24.5 24.9	25.3	63.5 70.2	76.4	4.3 4.6	4.9	112
181	176 186	194	178 210	59.5 63.2	66.9	1.04 1.45	1.86	5.03 5.35	5.67	25.0 25.4	25.8	68.5 74.9	80.8	6.1 6.4	6.7	263
172	167 177	223	207 239	65.9 69.6	73.3	1.86 2.27	2.68	4.02 4.34	4.66	24.6 25.0	25.4	64.4 71.1	77.2	5.0 5.3	5.6	227
179	174 184	210	194 226	65.3 69.0	72.7	1.46 1.87	2.28	4.34 4.66	4.98	24.6 25.0	25.4	66.0 72.6	78.6	4.5 4.8	5.1	299
176	171 181	212	196 228	63.3 67.0	70.7	1.54 1.95	2.36	4.52 4.84	5.16	24.6 25.0	25.4	64.8 71.4	77.5	5.0 5.3	5.6	521
178	173 183	214	198 230	63.4 67.1	70.8	2.00 2.41	2.82	4.43 4.75	5.07	25.7 26.1	26.5	78.2 83.8	88.6	6.0 6.3	6.6	117
177	172 182	215	199 231	65.5 69.2	72.9	1.74 2.15	2.56	4.16 4.48	4.80	24.5 24.9	25.3	65.9 72.5	78.5	4.4 4.7	5.0	235
177	172 182	213	197 229	65.9 69.6	73.3	1.64 2.05	2.46	4.28 4.60	4.92	24.8 25.2	25.6	68.8 75.2	81.0	4.3 4.6	4.9	278
179	174 184	209	193 225	64.6 68.3	72.0	1.54 1.95	2.36	4.31 4.63	4.95	24.7 25.1	25.5	66.6 73.2	79.1	4.5 4.8	4.8	229
179	174 184	198	182 214	60.9 64.6	68.3	1.32 1.73	2.14	5.03 5.35	5.67	24.5 24.9	25.3	66.5 73.1	79.0	6.2 6.5	6.8	522
174	169 179	214	198 230	63.5 67.2	70.9	1.73 2.14	2.55	4.18 4.50	4.82	24.6 25.0	25.4	64.9 71.5	77.6	4.5 4.8	4.8	124
178	173 183	197	181 213	62.1 65.8	69.5	1.40 1.81	2.22	4.70 5.02	5.34	24.7 25.1	25.5	65.6 72.2	78.3	5.4 5.7	6.0	551
175	170 180	191	175 207	61.6 65.3	69.0	1.26 1.67	2.08	4.37 4.69	5.01	24.7 25.1	25.5	65.6 72.2	78.3	4.2 4.5	4.8	525
172	167 177	208	192 224	63.4 67.1	70.8	1.55 1.96	2.37	4.22 4.54	4.86	24.9 25.3	25.7	67.0 73.5	79.4	4.4 4.7	5.0	539
186	181 191	174	158 190	62.2 65.9	69.6	.88 1.29	1.70	5.49 5.81	6.13	23.9 24.3	24.7	57.9 64.9	71.4	5.9 6.2	6.5	524
175	170 180	226	210 242	67.5 71.2	74.9	2.08 2.49	2.90	3.88 4.20	4.52	24.9 25.3	25.7	66.6 75.0	80.8	4.1 4.4	4.7	294
176	171 181	214	198 230	64.6 68.3	72.0	1.71 2.12	2.53	4.10 4.42	4.74	25.0 25.4	25.8	67.8 74.3	80.2	4.4 4.7	5.0	126
176	171 181	208	192 224	64.2 67.9	71.6	1.55 1.96	2.37	4.30 4.62	4.94	24.6 25.0	25.4	64.5 71.2	77.3	4.6 4.9	5.2	549
176	171 181	210	194 226	64.9 68.6	72.3	1.65 2.06	2.47	4.26 4.58	4.90	24.8 25.2	25.6	67.0 73.5	79.5	4.9 5.2	5.5	548
176	171 181	210	194 226	63.2 66.9	70.6	1.88 2.29	2.70	4.51 4.83	5.15	25.3 25.7	26.1	73.8 79.8	85.2	6.0 6.3	6.6	133

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
555	Nelson, George F. Rt. 2, Truro, Nova Scotia	RIR x LS BX	Nelson's	1	28.0	3.0	1.7 4.6	4.9 8.4	12.6
139	Niles Poultry Breeding Fr. Niles, California	WL SX	Niles	1	36.0	2.5	1.3 4.0	6.6 10.5	15.1
140	Niles Poultry Breeding Fr. Niles, California	CG x WL BX	Commercial	1	36.0	2.5	1.3 4.0	7.4 11.5	16.3
526	Noble Bros. Orangeville, Ontario	WL SX	N-60	1	33.0	3.3	1.9 4.9	7.3 11.4	16.2
302	Norco Poultry Breeding Fr. Norco, California	WL PS	Grade AA	1	38.0	2.5	1.3 4.0	7.0 11.1	15.8
143	Norris, Vernon Valencia, Pennsylvania	WL PS	Efficiency Leghorns	1	40.0	3.3	1.9 5.0	6.5 10.4	15.0
157	North Central Regional Lab. Lafayette, Indiana	RIR x WL BX	Random Bred Cross	1	41.0	3.8	2.3 5.6	7.7 11.8	16.7
257	North Central Regional Lab. Lafayette, Indiana	RIR PS	Random Bred Red	1	40.0	3.0	1.7 4.6	7.1 11.1	15.8
528	Ontario Agricultural College Guelph, Ontario	WL SX	Strain Cross	1	40.0	3.5	2.1 5.2	5.4 9.0	13.4
145	Ottawa Central Expt. Farm Ottawa, Ontario	WL PS	Random Bred	3	41.0	3.4	2.0 5.0	8.7 13.2	18.2
228	Parmenter Reds Franklin, Massachusetts	RIR SX	PM 1	3	36.0	4.9	3.1 6.8	6.1 10.0	14.5
151	Peerless Hatchery Spencer, Iowa	WL SX	Peerless 262	2	39.0	2.9	1.6 4.5	9.4 13.9	19.1
152	Pa. Farm Bureau Hatchery Harrisburg, Pennsylvania	WL SX	LSC 55	2	42.0	4.2	2.6 6.0	7.2 11.2	16.0
234	Pa. Farm Bureau Hatchery Harrisburg, Pennsylvania	WL SX	LSC 60	1	43.0	2.5	1.3 4.0	6.5 10.4	15.0
154	Pillsbury Company Clinton, Iowa	WL SX	Maxi-Lay Queens	3	44.0	3.3	1.9 4.9	8.6 13.0	18.0
301	Pollard Farms Tustin, California	SYN x WL BX	Silver X Leghorn	1	36.0	3.4	2.0 5.1	5.1 8.7	13.0
538	Purdy, Miss H. M. Balcarres, Saskatchewan	LS x WL BX	Triline	1	39.0	2.8	1.5 4.3	7.1 11.2	15.9
159	Randall Hatchery & Br. Fr. Montclair, California	CG x WL BX	Randall	1	36.0	3.2	1.8 4.8	7.6 11.8	16.6
160	Rapp Leghorn Farm Farmingdale, New Jersey	WL SX	Rapp Linecross	10	38.9	3.0	1.7 4.6	7.0 11.1	15.8
530	Raynor, Ralph Charlottetown, P. E. I.	WL SX	Raynor R-60	2	40.0	2.9	1.6 4.4	8.8 13.2	18.3
164	Richardson Poultry Br. Fr. Redlands, California	WA BX	Commercial	1	44.0	2.5	1.3 4.0	4.8 8.3	12.5

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST		FEED PER 24 OZ. OF EGGS PRODUCED		EGG WEIGHT		LARGE AND EXTRA LARGE EGGS		BODY WEIGHT		STOCK CODE
		HEN HOUSED		HEN DAY												
(Days)		(No.)		(%)		(\$)		(lbs)		(oz)		(%)		(lbs)		
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	
173	168 178	210	194 226	66.5	62.8 70.2	2.11	2.52	4.96	4.64 5.28	25.7	25.3 26.1	77.9	71.7 83.4	6.7	6.4 7.0	555
174	169 179	209	193 225	66.7	63.0 70.4	1.94	2.35	4.59	4.27 4.91	24.9	24.5 25.3	70.6	63.9 76.8	4.5	4.2 4.8	139
172	167 177	220	204 236	69.3	65.6 73.0	2.03	2.44	4.59	4.27 4.91	25.5	25.1 25.9	74.0	67.5 79.9	5.4	5.1 5.7	140
176	171 181	211	195 227	67.5	63.8 71.2	2.04	2.45	4.53	4.21 4.85	24.8	24.4 25.2	69.0	62.2 75.3	4.3	4.0 4.6	526
173	168 178	217	201 233	68.1	64.4 71.8	1.96	2.37	4.73	4.41 5.05	25.0	24.6 25.4	71.2	64.5 77.3	5.2	4.9 5.5	302
180	175 185	210	194 226	67.7	64.0 71.4	2.06	2.47	4.44	4.12 4.76	24.8	24.4 25.2	69.8	63.1 76.1	4.1	3.8 4.4	143
176	171 181	204	188 220	66.0	62.3 69.7	1.49	1.90	5.05	4.73 5.37	24.6	24.2 25.0	66.1	59.2 72.6	5.7	5.4 6.0	157
178	173 183	205	189 221	65.6	61.9 69.3	1.62	2.03	5.28	4.96 5.60	25.1	24.7 25.5	73.0	66.4 79.0	6.3	6.0 6.6	257
184	179 189	215	199 231	68.9	65.2 72.6	2.04	2.45	4.50	4.18 4.82	25.0	24.6 25.4	74.8	68.4 80.7	4.3	4.0 4.6	528
182	177 187	197	181 213	65.5	61.8 69.2	1.51	1.92	4.90	4.58 5.22	23.9	23.5 24.3	58.7	51.6 65.5	4.5	4.2 4.8	145
176	171 181	207	191 223	65.8	62.1 69.5	2.10	2.51	4.85	4.53 5.17	25.0	24.6 25.4	72.4	65.9 78.5	6.0	5.7 6.3	228
176	171 181	219	203 235	70.4	66.7 74.1	2.11	2.52	4.55	4.23 4.87	24.5	24.1 24.9	67.4	60.5 73.8	5.0	4.7 5.3	151
175	170 180	219	203 235	69.6	65.9 73.3	2.18	2.59	4.43	4.11 4.75	24.8	24.4 25.2	71.3	64.6 77.4	4.4	4.1 4.7	152
174	169 179	225	209 241	70.4	66.7 74.1	2.30	2.71	4.39	4.07 4.71	24.9	24.5 25.3	70.0	63.3 76.2	4.6	4.3 4.9	234
178	173 183	217	201 233	69.4	65.7 73.1	2.28	2.69	4.36	4.04 4.68	25.1	24.7 25.5	75.2	68.8 81.0	4.4	4.1 4.7	154
172	167 177	219	203 235	68.7	65.0 72.4	1.95	2.36	4.66	4.34 4.98	24.8	24.4 25.2	68.3	61.5 74.6	5.5	5.2 5.8	301
168	163 173	212	196 228	66.8	63.1 70.5	1.84	2.25	4.81	4.49 5.13	24.3	23.9 24.7	63.6	56.7 70.3	5.5	5.2 5.8	538
171	166 176	223	207 239	69.9	66.2 73.6	2.17	2.58	4.52	4.20 4.84	24.8	24.4 25.2	68.3	61.5 74.6	5.2	4.9 5.5	159
178	173 183	218	202 234	70.4	66.7 74.1	2.18	2.59	4.48	4.16 4.80	24.9	24.5 25.3	72.3	65.7 78.3	4.4	4.1 4.7	160
178	173 183	208	192 224	69.1	65.4 72.8	1.95	2.36	4.45	4.13 4.77	24.6	24.2 25.0	67.8	61.0 74.2	4.4	4.1 4.7	530
172	167 177	231	215 247	71.3	67.6 75.0	2.15	2.56	4.59	4.27 4.91	24.3	23.9 24.7	64.7	57.7 71.3	5.3	5.0 5.6	164

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

## All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
165	Richardson Poultry Br. Fr. Redlands, California	WA BX	Commercial MWA	1	44.0	4.1	2.6 6.0	6.5 10.4	15.0
249	Riddle Spring Poultry Farm Manchester, New Hamp.	BX	Super-Triway	1	30.0	3.3	1.9 5.0	4.9 8.4	12.7
300	Santa Clara Rialto Hatchery Rialto, California	CG x WL BX	Santa Clara	1	30.0	2.5	1.3 4.0	6.7 10.7	15.4
531	Scattered Acres Hatchery Rt. 3, Hanover, Ontario	WL x (BLxLS)	Hanover 30	1	34.0	4.8	3.1 6.7	9.9 14.5	19.7
176	Schaible, Louis D. Shiloh, New Jersey	WL SX	Commercial 2	2	37.0	3.2	1.9 4.9	6.9 11.0	15.7
295	Schaible, Louis D. Shiloh, New Jersey	WL SX	K Cross	6	37.0	2.9	1.6 4.5	6.3 10.2	14.8
178	Schildmeyer's Plty. Br. Fr. Orange, California	CG x WL BX	Commercial	1	34.0	3.8	2.3 5.6	8.9 13.3	18.4
297	Schildmeyer's Plty. Br. Fr. Orange, California	SYN x WL BX	S-44	1	34.0	3.2	1.8 4.8	8.5 12.9	17.9
547	Searle, Clarence Centre Napan, N. B.	RIR x CR BX	Red Cross	1	30.0	3.0	1.7 4.6	7.4 11.6	16.4
181	Shaver Poultry Breeding Fr. Galt, Ontario	WL SX	Starcross 288	14	42.1	2.6	1.4 4.1	6.5 10.4	15.0
236	Shaver Poultry Breeding Fr. Galt, Ontario	WL SX	3-W	1	44.0	3.3	1.9 5.0	7.1 11.1	15.9
536	Smith, James 316 9th St., Nanaimo, B. C.	WL SX	501 X 507	1	40.0	3.5	2.1 5.2	8.6 12.9	18.0
533	Starline Breeders Hatchery Saskatoon, Saskatchewan	CG x WL BX	Pearlette	2	38.0	3.0	1.7 4.5	7.6 11.7	16.6
282	Stever Poultry Farm Huntingdon, Pennsylvania	WL SX	303	1	39.0	2.5	1.3 4.0	7.9 12.2	17.1
251	Stone Bros. Hatchery Madelia, Minnesota	WL SX	Stone 158	1	45.0	3.7	2.2 5.4	7.1 11.2	15.9
190	Stone's Poultry Farm Dinuba, California	WL SX	H 56	1	38.0	2.5	1.3 4.0	5.5 9.2	13.6
196	Sunnyside Hatchery Watertown, Wisconsin	CG x WL BX	Wisco White	1	36.0	3.0	1.7 4.6	8.4 12.7	17.7
197	Swift & Co. Chicago, Illinois	WL SX	Ski-Hi 316	2	44.0	3.5	2.1 5.2	9.5 14.1	19.3
199	Townline Poultry Farm Zeeland, Michigan	WL SX	SC 30	2	36.0	3.3	1.9 4.9	7.6 11.7	16.6
556	Triska, Eric Edmonton, Alberta	WL SX	Belmont 292	3	37.0	4.4	2.8 6.3	9.6 14.2	19.4
534	Triska, Eric Edmonton, Alberta	WL SX	Belmont 292A	1	37.0	3.4	2.0 5.0	7.2 11.3	16.1

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

AGE AT 50% PRODUCTION		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST		FEED PER 24 OZ. OF EGGS PRODUCED		EGG WEIGHT		LARGE AND EXTRA LARGE EGGS		BODY WEIGHT		STOCK CODE	
		HEN HOUSED		HEN DAY													
		(Days)	(No.)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
173	168 178	218	202 234	64.8 68.5	72.2	2.10	1.69 2.51	4.20 4.84	4.52	24.3 25.1	24.7	63.0 76.0	69.7	4.4 5.0	4.7	165	
176	171 181	209	193 225	62.3 66.0	69.7	2.27	1.86 2.68	4.54 5.18	4.86	25.2 26.0	25.6	72.9 84.4	79.0	5.9 6.5	6.2	249	
173	168 178	219	203 235	65.6 69.3	73.0	2.01	1.60 2.42	4.30 4.94	4.62	24.8 25.6	25.2	65.4 78.1	72.0	4.9 5.5	5.2	300	
175	170 180	193	177 209	60.9 64.6	68.3	1.75	1.34 2.16	4.51 5.15	4.83	24.6 25.4	25.0	63.9 76.8	70.6	4.4 5.0	4.7	531	
175	170 180	220	204 236	65.9 69.6	73.3	2.32	1.91 2.73	4.05 4.69	4.37	24.4 25.2	24.8	66.0 78.6	72.6	5.9 6.5	4.2	176	
177	172 182	213	197 229	63.7 67.4	71.1	2.16	1.75 2.57	4.16 4.80	4.48	24.7 25.5	25.1	67.9 80.2	74.3	5.9 6.5	4.2	295	
172	167 177	218	202 234	66.0 69.7	73.4	2.01	1.60 2.42	4.20 4.84	4.52	24.3 25.1	24.7	59.8 73.1	66.6	4.8 5.4	5.1	178	
173	168 178	205	189 221	63.1 66.8	70.5	1.83	1.42 2.24	4.30 4.94	4.62	23.8 24.6	24.2	56.3 70.0	63.3	4.3 4.9	4.6	297	
178	173 183	197	181 213	60.8 64.5	68.2	1.84	1.43 2.25	4.65 5.29	4.97	25.1 25.9	25.5	69.1 81.3	75.5	5.2 5.8	5.5	547	
171	166 176	234	218 250	70.6 74.3	78.0	2.43	2.02 2.84	4.01 4.65	4.33	24.7 25.5	25.1	67.6 80.0	74.1	4.5 5.1	4.8	181	
176	171 181	213	197 229	64.3 68.0	71.7	2.02	1.61 2.43	4.24 4.88	4.56	24.7 25.5	25.1	64.9 77.7	71.6	4.5 5.1	4.8	236	
174	169 179	210	194 226	61.9 65.6	69.3	1.77	1.36 2.18	4.62 5.26	4.94	24.0 24.8	24.4	55.1 68.8	62.1	4.8 5.4	5.1	536	
170	165 175	214	198 230	65.1 68.8	72.5	1.97	1.56 2.38	4.23 4.87	4.55	24.2 25.0	24.6	57.4 70.9	64.4	5.2 5.8	5.5	533	
177	172 182	213	197 229	64.1 67.8	71.5	1.94	1.53 2.35	4.28 4.92	4.60	24.3 25.1	24.7	63.2 76.1	69.9	5.8 6.4	4.1	282	
176	171 181	218	202 234	64.2 67.9	71.6	2.21	1.80 2.62	4.03 4.67	4.35	24.9 25.7	25.3	67.9 80.2	74.3	4.3 4.9	4.6	251	
172	167 177	231	215 247	67.6 71.3	75.0	2.44	2.03 2.85	3.98 4.62	4.30	24.6 25.4	25.0	65.5 78.2	72.1	4.5 5.1	4.8	190	
174	169 179	206	190 222	63.6 67.3	71.0	1.90	1.49 2.31	4.31 4.95	4.63	24.5 25.3	24.9	64.4 77.2	71.1	4.8 5.4	5.1	196	
176	171 181	216	200 232	66.5 70.2	73.9	2.11	1.70 2.52	4.18 4.82	4.50	24.7 25.5	25.1	66.5 79.0	73.0	4.4 5.0	4.7	197	
177	172 182	214	198 230	65.3 69.0	72.7	2.10	1.69 2.51	4.10 4.74	4.42	24.4 25.2	24.8	64.0 76.9	70.7	4.0 4.6	4.3	199	
177	172 182	209	193 225	66.2 69.9	73.6	1.99	1.58 2.40	4.29 4.93	4.61	24.4 25.2	24.8	63.4 76.3	70.1	4.6 5.2	4.9	556	
175	170 180	213	197 229	65.5 69.2	72.9	2.03	1.62 2.44	4.30 4.94	4.62	24.5 25.3	24.9	64.0 76.9	70.7	4.2 4.8	4.5	534	

If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

## All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. ENTRIES	AVG. CHICK PRICE (c)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
231	Truway Farms East Berlin, Pennsylvania	WL SX	Trubred #21	2	36.0	3.6	2.1 5.3	8.5 12.8	17.8
201	University of Missouri Columbia, Missouri	WL PS	Intra Flock	1	34.0	3.9	2.4 5.6	7.2 11.2	16.0
202	Vancrest Farms Hyde Park, New York	RIR x NH BX	All Red	1	32.0	3.2	1.8 4.8	8.2 12.5	17.5
261	Ward Poultry Farm Independence, Iowa	BX	Wardcrost 356	1	40.0	3.4	2.0 5.0	8.6 13.0	18.0
42	Warren, J. J. N. Brookfield, Mass.	WL SX	Warren-Darby DX	7	41.4	3.1	1.8 4.8	4.9 8.4	12.6
250	Warren, J. J. N. Brookfield, Mass.	WL x SYN BX	Warren J-J	2	38.0	2.5	1.3 4.0	7.0 11.0	15.7
208	Warren, J. J. N. Brookfield, Mass.	RIR x RIW BX	Sex-Sal-Link	5	41.6	2.7	1.5 4.2	7.5 11.6	16.5
305	Warren, J. J. N. Brookfield, Mass.	RIR x RIW BX	Sex-Sal-F	1	42.0	2.5	1.3 4.0	5.2 8.8	13.1
210	Webster Poultry Farms Auburn, New York	RIR PS	Certified	1	37.0	3.2	1.8 4.8	8.9 13.3	18.4
272	Wells, George E. & Son, Inc. New Milford, Connecticut	RIR x BPR BX	Black Sex-Link	1	31.0	2.4	1.2 3.8	5.5 9.1	13.5
212	Welp's Breeding Farm Bancroft, Iowa	WL SX	901	1	39.0	3.5	2.1 5.2	8.7 13.0	18.1
290	Welp's Breeding Farm Bancroft, Iowa	WL SX	937	3	40.5	3.1	1.8 4.7	4.3 7.6	11.7
298	White Farms Corona, California	CG x WL BX	White	1	30.0	3.8	2.3 5.6	7.4 11.5	16.4
217	Wirtz Bros. Leghorn Farm Lebanon, New Jersey	WL LX	Linecross	1	38.0	2.5	1.3 4.0	6.3 10.2	14.8
280	Wolf's Hatchery Bloomsburg, Pennsylvania	WL SX	B-J	1	39.0	2.5	1.3 4.0	7.0 11.1	15.8
219	Wood Poultry Breeding Fr. Pomona, California	AW BX	Commercial	1	43.0	2.5	1.3 4.0	7.5 11.7	16.5
284	Zewan, William G. Nicholson, Pennsylvania	WL SX	Strain B	1	34.0	2.5	1.3 4.0	8.3 12.6	17.6

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



AGE AT 50% PRODUCTION  (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST  (\$)		FEED PER 24 OZ. OF EGGS PRODUCED  (lbs)		EGG WEIGHT  (oz)		LARGE AND EXTRA LARGE EGGS  (%)		BODY WEIGHT  (lbs)		STOCK CODE
		HEN HOUSEO		HEN DAY												
		(No.)		(% )												
RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	
179	174 184	199	183 215	64.8	61.1 68.5	1.86	1.45 2.27	4.60	4.28 4.92	25.1	24.7 25.5	73.1	66.6 79.1	4.0	3.7 4.3	231
175	170 180	218	202 234	69.2	65.5 72.9	2.10	1.69 2.51	4.49	4.17 4.81	24.3	23.9 24.7	63.5	56.5 70.1	4.4	4.1 4.7	201
179	174 184	207	191 223	67.8	64.1 71.5	2.00	1.59 2.41	4.86	4.54 5.18	25.2	24.8 25.6	75.6	69.2 81.3	5.7	5.4 6.0	202
178	173 183	201	185 217	66.0	62.3 69.7	1.85	1.44 2.26	4.64	4.32 4.96	24.9	24.5 25.3	72.5	65.9 78.5	4.8	4.5 5.1	261
183	178 188	218	202 234	69.7	66.0 73.4	2.20	1.79 2.61	4.45	4.13 4.77	24.8	24.4 25.2	72.0	65.4 78.1	4.4	4.1 4.7	42
177	172 182	219	203 235	70.0	66.3 73.7	2.10	1.69 2.51	4.47	4.15 4.79	24.9	24.5 25.3	71.3	64.7 77.5	4.5	4.2 4.8	250
177	172 182	209	193 225	67.9	64.2 71.6	2.27	1.86 2.68	4.55	4.23 4.87	25.2	24.8 25.6	73.0	66.4 79.0	5.3	5.0 5.6	208
177	172 182	219	203 235	68.7	65.0 72.4	2.43	2.02 2.84	4.46	4.14 4.78	25.7	25.3 26.1	76.5	70.2 82.1	5.7	5.4 6.0	305
178	173 183	211	195 227	68.9	65.2 72.6	2.08	1.67 2.49	4.65	4.33 4.97	24.9	24.5 25.3	72.3	65.7 78.3	5.4	5.1 5.7	210
178	173 183	213	197 229	67.4	63.7 71.1	2.29	1.88 2.70	4.84	4.52 5.16	25.3	24.9 25.7	76.7	70.4 82.4	6.1	5.8 6.4	272
180	175 185	209	193 225	68.2	64.5 71.9	2.05	1.64 2.46	4.34	4.02 4.66	24.8	24.4 25.2	70.0	63.3 76.2	4.2	3.9 4.5	212
174	169 179	233	217 249	72.9	69.2 76.6	2.63	2.22 3.04	4.08	3.76 4.40	25.0	24.6 25.4	73.2	66.6 79.1	4.2	3.9 4.5	290
174	169 179	223	207 239	70.4	66.7 74.1	2.12	1.71 2.53	4.55	4.23 4.87	25.6	25.2 26.0	73.8	67.3 79.7	5.3	5.0 5.6	298
174	169 179	214	198 230	67.4	63.7 71.1	2.02	1.61 2.43	4.65	4.33 4.97	24.9	24.5 25.3	71.1	64.4 77.3	4.5	4.2 4.8	217
175	170 180	214	198 230	67.9	64.2 71.6	2.04	1.63 2.45	4.54	4.22 4.86	25.0	24.6 25.4	71.6	64.9 77.7	4.5	4.2 4.8	280
171	166 176	214	198 230	67.7	64.0 71.4	1.93	1.52 2.34	4.55	4.23 4.87	24.8	24.4 25.2	69.3	62.5 75.5	5.0	4.7 5.3	219
177	172 182	206	190 222	67.0	63.3 70.7	1.92	1.51 2.33	4.58	4.26 4.90	25.2	24.8 25.6	73.1	66.5 79.1	4.6	4.3 4.9	284

\*If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (Haugh units)		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS (1/1000 inch)	
				1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)			
		RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
	Allstate		75.8		0.5		0.9		0.0		0.0		13.7
3	LX 330	78.5	81.2	0.8	1.2	1.6	2.3	0.3	2.7	1.2	5.5	14.1	14.5
	Ames		76.4		.4		.8		.0		.0		13.8
5	424	79.1	81.8	.7	1.0	1.5	2.2	.8	4.0	1.5	6.3	14.2	14.6
	Ames		75.2		.4		1.0		.0		.0		13.9
7	434 R	77.9	80.6	.8	1.1	1.7	2.5	.4	3.1	1.0	5.3	14.3	14.7
	Ames		75.8		.6		2.0		7.4		21.5		13.6
8	505	78.5	81.2	.9	1.3	3.0	4.0	14.4	23.2	33.3	46.0	14.0	14.4
	Andrews		76.1		.5		.9		.0		.0		13.7
537	Polka Dot	78.8	81.5	.8	1.1	1.5	2.3	.5	3.3	2.1	7.5	14.1	14.5
	Anthony		76.7		.8		1.4		.0		.0		13.4
10	WL	79.4	82.1	1.2	1.6	2.3	3.1	.2	2.5	1.5	6.3	13.8	14.2
	Appleby		75.2		.7		1.0		.0		.0		14.0
502	Life Line	77.9	80.6	1.1	1.5	1.6	2.4	1.1	4.7	2.2	7.5	14.4	14.8
	Arbor Acres		76.9		.7		.9		.0		.0		13.8
138	Queen	79.6	82.3	1.1	1.5	1.6	2.3	.4	3.0	.7	4.6	14.2	14.6
	Arnold		74.5		.8		2.0		5.7		11.3		13.4
540	Hybred 255	77.2	79.9	1.2	1.6	2.9	3.9	12.1	20.4	21.0	32.5	13.8	14.2
	Austin's		74.6		.6		1.3		.0		.0		13.8
541	WL	77.3	80.0	1.0	1.4	2.0	2.9	.6	3.6	.9	5.0	14.2	14.6
	Avery		68.3		.9		1.9		1.1		4.7		13.1
232	Flock Mating	71.0	73.7	1.3	1.7	2.8	3.8	4.7	10.6	11.7	21.4	13.5	13.9
	Babcock		75.7		.7		1.2		.0		.0		13.7
13	Bessie	78.4	81.1	1.1	1.5	1.9	2.7	.6	3.6	1.2	5.7	14.1	14.5
	Babcock		73.4		.7		1.0		.0		.0		13.8
237	Bonnie	76.1	78.8	1.1	1.5	1.7	2.5	.6	3.6	1.3	5.8	14.2	14.6
	Balakshin		75.8		.7		1.5		.0		.0		13.9
505	WL	78.5	81.2	1.1	1.5	2.3	3.2	.7	3.8	2.0	7.1	14.3	14.7
	Ball		73.9		.6		1.2		.0		.0		13.8
17	551	76.6	79.3	1.0	1.4	2.0	2.8	.8	4.0	1.4	6.0	14.2	14.6
	Ball		74.8		.6		1.4		----		----		13.9
293	551 A	77.5	80.2	1.0	1.4	2.2	3.1	----	----	----	----	14.3	14.7
	Ball		74.2		.7		1.2		.0		.0		13.6
259	#591	76.9	79.6	1.1	1.5	1.9	2.7	.6	3.6	1.2	5.7	14.0	14.4
	Ball		74.4		.7		1.2		----		----		13.9
233	#592	77.1	79.8	1.1	1.5	2.0	2.8	----	----	----	----	14.3	14.7
	Baumgartner		76.2		.5		1.2		.0		.0		13.1
269	#408	78.9	81.6	.9	1.2	2.0	2.8	1.0	4.3	2.3	7.8	13.5	13.9
	Beamsdale		75.9		.8		1.4		.0		.0		13.8
20	66	78.6	81.3	1.2	1.6	2.2	3.1	.4	3.1	.1	2.5	14.2	14.6
	Booth		71.9		.7		1.4		.0		.1		13.6
22	Line 351	74.6	77.3	1.1	1.4	2.2	3.1	1.2	4.8	2.4	7.9	14.0	14.4

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
				1/8 INCH OR MORE		LESS THAN 1/8 INCH		1/8 INCH OR MORE		LESS THAN 1/8 INCH			
		(Haugh units)		(%)		(%)		(%)		(%)		(1/1000 inch)	
		RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
230	Brender's Money Maker #1	77.5	74.8 80.2	1.0	0.6 1.3	2.1	1.3 2.9	0.7	0.0 3.7	0.6	0.0 4.3	14.4	14.0 14.8
506	Buchanan's Kanaka White	75.5	72.8 78.2	.8	.5 1.2	2.6	1.7 3.6	1.2	.0 4.9	7.9	2.3 16.2	14.3	13.9 14.7
291	Buck Hill Sex Link	76.0	73.3 78.7	1.0	.6 1.4	2.3	1.4 3.1	10.3	4.4 18.1	15.4	7.2 25.9	13.8	13.4 14.2
26	Bundesen Graycie	74.4	71.7 77.1	.9	.5 1.2	1.8	1.1 2.5	.4	.0 2.9	----	-----	13.8	13.4 14.2
553	Burpee Burpee's	76.7	74.0 79.4	1.0	.6 1.4	2.4	1.6 3.4	3.3	.5 8.5	10.5	3.9 19.7	13.9	13.5 14.3
544	Burpee No. 1	78.0	75.3 80.7	.7	.4 1.0	1.6	.9 2.4	2.5	.2 7.2	3.9	.5 10.5	14.3	13.9 14.7
554	Bustin Bustin's	78.9	76.2 81.6	1.1	.7 1.5	2.5	1.6 3.4	4.7	1.1 10.6	13.3	5.7 23.3	14.0	13.6 14.4
283	Cameron #924	79.3	76.6 82.0	1.0	.6 1.4	1.8	1.1 2.6	1.5	.0 5.5	2.8	.1 8.7	14.1	13.7 14.5
30	Carey Nick	79.6	76.9 82.3	.8	.5 1.2	1.8	1.1 2.6	.6	.0 3.6	1.2	.0 5.7	14.4	14.0 14.8
287	Carey 3-C	79.3	76.6 82.0	1.0	.7 1.4	2.2	1.4 3.1	.5	.0 3.4	2.0	.0 7.3	14.5	14.1 14.9
292	Carey E. J. 's	79.0	76.3 81.7	1.0	.6 1.4	1.9	1.2 2.7	----	-----	----	-----	14.2	13.8 14.6
31	Cashman Hi-Cash	76.5	73.8 79.2	1.5	1.0 2.0	2.1	1.4 3.0	.9	.0 4.3	2.1	.0 7.5	14.3	13.9 14.7
304	Cashman Astronauts	76.3	73.6 79.0	.9	.5 1.2	2.0	1.3 2.8	.7	.0 3.7	2.2	.0 7.6	14.4	14.0 14.8
32	Childers CG x WL	75.3	72.6 78.0	1.0	.6 1.3	2.0	1.3 2.9	.6	.0 3.5	----	-----	13.7	13.3 14.1
507	Clark's 41	76.5	73.8 79.2	1.0	.6 1.4	2.6	1.7 3.5	4.7	1.1 10.5	12.7	5.3 22.6	14.0	13.6 14.4
545	Clark's 45	74.5	71.8 77.2	1.1	.7 1.4	2.0	1.3 2.9	5.5	1.5 11.8	10.8	4.1 20.2	14.4	14.0 14.8
550	Clark's 541	76.7	74.0 79.4	.9	.6 1.3	1.8	1.1 2.6	3.4	.5 8.6	9.8	3.4 18.8	14.2	13.8 14.6
508	Clark's Paymaster 101	77.9	75.2 80.6	.8	.5 1.1	2.1	1.3 3.0	11.9	5.5 20.1	23.5	13.4 35.4	13.7	13.3 14.1
34	Colonial Best Egg Grade	78.0	75.3 80.7	1.0	.7 1.4	2.0	1.3 2.8	.3	.0 2.7	2.0	.0 7.2	14.2	13.8 14.6
35	Colonial True Line 365	78.7	76.0 81.4	1.5	1.0 2.0	2.1	1.3 3.0	.5	.0 3.4	.8	.0 4.7	14.2	13.8 14.6
289	Colonial True Line 365 B	79.3	76.6 82.0	1.5	1.0 2.0	1.7	1.0 2.5	.4	.0 3.1	.7	.0 4.5	14.2	13.8 14.6

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
				1/8 INCH OR MORE		LESS THAN 1/8 INCH		1/8 INCH OR MORE		LESS THAN 1/8 INCH			
		(Haugh units)		(%)		(%)		(%)		(%)		(1/1000 inch)	
		RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
546	Co-op Cross	76.3	73.6 79.0	1.1	0.7 1.4	2.0	1.2 2.8	4.5	1.0 10.3	10.5	3.9 19.8	14.0	13.6 14.4
37	Cornell Random Bred	77.1	74.4 79.8	1.6	1.1 2.1	2.5	1.6 3.4	.3	.0 2.9	1.1	.0 5.4	14.0	13.6 14.4
510	Couvoir Corvette	79.6	76.9 82.3	1.0	.6 1.3	1.6	1.0 2.4	1.1	.0 4.7	1.3	.0 5.8	13.8	13.4 14.2
542	Couvoir La Chateauguay	79.7	77.0 82.4	.9	.5 1.2	2.0	1.2 2.8	1.1	.0 4.5	2.2	.0 7.5	13.9	13.5 14.3
511	Dawson Series 1000	77.8	75.1 80.5	1.0	.7 1.4	2.2	1.4 3.0	2.9	.3 7.8	8.4	2.6 16.9	14.0	13.6 14.4
45	DeKalb 101	77.7	75.0 80.4	1.0	.6 1.4	1.9	1.2 2.7	.6	.0 3.5	1.6	.0 6.4	13.8	13.4 14.2
48	DeKalb 131	77.8	75.1 80.5	.9	.6 1.3	1.7	1.0 2.5	.9	.0 4.3	1.5	.0 6.2	13.9	13.5 14.3
277	DeKalb 151	81.5	78.8 84.2	.8	.4 1.1	1.1	.6 1.7	.4	.0 3.0	.7	.0 4.4	14.3	13.9 14.7
256	Del Rio RIR	78.1	75.4 80.8	1.0	.6 1.4	2.0	1.2 2.8	5.6	1.5 11.9	6.9	1.8 14.9	13.2	12.8 13.6
51	Demler WL	76.9	74.2 79.6	1.0	.6 1.4	1.9	1.1 2.7	.2	.0 2.3	1.3	.0 5.8	14.2	13.8 14.6
52	Demler Kross	75.1	72.4 77.8	1.0	.6 1.4	1.8	1.1 2.6	.4	.0 3.1	.8	.0 4.8	13.9	13.5 14.3
254	Demler IBX	77.8	75.1 80.5	1.0	.7 1.4	1.9	1.1 2.7	.5	.0 3.2	1.3	.0 5.9	14.1	13.7 14.5
513	deZeeuw 601	77.6	74.9 80.3	1.1	.7 1.5	2.2	1.4 3.1	1.4	.0 5.2	1.3	.0 5.8	14.2	13.8 14.6
514	deZeeuw 752	76.1	73.4 78.8	1.1	.7 1.5	2.2	1.4 3.0	1.2	.0 4.8	1.0	.0 5.1	14.0	13.6 14.4
270	Dryden Gray X Leghorn	76.8	74.1 79.5	.9	.5 1.2	2.1	1.3 2.9	1.0	.0 4.3	1.4	.0 6.1	13.7	13.3 14.1
271	Dryden SX 60	77.1	74.4 79.8	1.1	.7 1.5	2.1	1.3 2.9	.2	.0 2.5	1.1	.0 5.4	14.1	13.7 14.5
55	Eby's Grade #1	76.3	73.6 79.0	1.4	1.0 1.9	2.5	1.6 3.4	.7	.0 3.7	1.7	.0 6.6	14.1	13.7 14.5
59	Erath Str. X	77.7	75.0 80.4	1.1	.7 1.5	2.0	1.3 2.9	.4	.0 3.0	1.4	.0 6.1	14.2	13.8 14.6
517	Evans Echo Leghorns	78.5	75.8 81.2	1.3	.8 1.7	2.1	1.3 3.0	1.1	.0 4.7	2.2	.0 7.5	14.0	13.6 14.4
518	Fisher 103	76.7	74.0 79.4	1.0	.7 1.4	1.9	1.1 2.7	.5	.0 3.2	.8	.0 4.7	14.3	13.9 14.7
60	Fletcher FX 100	78.4	75.7 81.1	1.1	.7 1.4	2.1	1.3 2.9	.8	.0 4.0	.4	.0 3.7	14.7	14.3 15.1

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
				1/8 INCH OR MORE		LESS THAN 1/8 INCH		1/8 INCH OR MORE		LESS THAN 1/8 INCH			
		(Haugb units)		(%)		(%)		(%)		(%)		(1/1000 inch)	
		RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
245	Forsgate FF 166	79.5	76.8 82.2	1.0	0.7 1.4	2.2	1.4 3.0	1.3	0.0 5.1	0.8	0.0 4.8	13.8	13.4 14.2
246	Forsgate FF 160	79.7	77.0 82.4	.9	.5 1.2	1.9	1.1 2.7	.3	.0 2.8	1.2	.0 5.7	13.8	13.4 14.2
258	Forsgate WL	79.1	76.4 81.8	1.0	.6 1.3	1.8	1.1 2.6	.6	.0 3.6	1.2	.0 5.7	13.9	13.5 14.3
65	Garber CG x WL	76.6	73.9 79.3	.9	.6 1.3	1.8	1.1 2.6	.5	.0 3.2	----	----	14.0	13.6 14.4
66	Garber G 200	80.7	78.0 83.4	.9	.6 1.3	1.5	.9 2.3	.2	.0 2.5	----	----	14.3	13.9 14.7
253	Garber G 300	79.8	77.1 82.5	.8	.5 1.2	2.0	1.2 2.8	.6	.0 3.6	1.2	.0 5.7	14.2	13.8 14.6
281	Garber G 400	77.3	74.6 80.0	1.1	.7 1.4	2.0	1.2 2.8	1.0	.0 4.3	1.2	.0 5.6	13.9	13.5 14.3
69	Garrison Golden Sex Link	80.5	77.8 83.2	1.1	.7 1.5	2.5	1.6 3.4	1.6	.0 5.7	8.5	2.7 17.2	14.3	13.9 14.7
255	Garrison X 300	77.5	74.8 80.2	1.0	.7 1.4	2.0	1.3 2.8	.3	.0 2.8	3.1	.2 9.2	13.8	13.4 14.2
70	Gasson's G 33	78.9	76.2 81.6	.9	.5 1.2	1.9	1.2 2.7	.3	.0 2.6	1.3	.0 5.9	14.3	13.9 14.7
72	Ghostley's Pearl	80.0	77.3 82.7	1.2	.8 1.6	1.9	1.2 2.7	.3	.0 2.8	.7	.0 4.6	14.3	13.9 14.7
296	Goetz WL	78.0	75.3 80.7	1.1	.7 1.5	2.1	1.3 3.0	1.7	.0 5.8	1.6	.0 6.5	14.2	13.8 14.6
243	Good's WL	77.2	74.5 79.9	1.0	.6 1.4	2.1	1.3 2.9	.6	.0 3.6	1.2	.0 5.7	13.8	13.4 14.2
552	Goodine Breed Cross	77.3	74.6 80.0	.9	.5 1.2	1.7	1.0 2.5	3.2	.4 8.4	8.7	2.8 17.3	14.3	13.9 14.7
75	Great Plains Egg Master	78.6	75.9 81.3	1.0	.7 1.4	2.6	1.7 3.6	2.7	.3 7.6	2.5	.1 8.2	13.4	13.0 13.8
76	Great Plains Golden Cross	78.3	75.6 81.0	1.1	.7 1.4	2.2	1.4 3.0	2.2	.1 6.6	9.6	3.3 18.6	14.2	13.8 14.6
543	Groupe Maska Corvette 303	79.1	76.4 81.8	1.0	.6 1.3	2.1	1.3 2.9	1.1	.0 4.5	.6	.0 4.3	14.2	13.8 14.6
520	Groupe Oka Oka 39	79.1	76.4 81.8	1.0	.6 1.4	2.0	1.2 2.8	1.6	.0 5.6	2.4	.1 7.9	14.0	13.6 14.4
80	Hansen's Criss Cross H 25	78.2	75.5 80.9	1.0	.6 1.4	2.0	1.3 2.8	.6	.0 3.4	1.1	.0 5.4	14.1	13.7 14.5
82	Hansen's Criss Cross 61	77.6	74.9 80.3	1.2	.7 1.5	1.7	1.0 2.5	.6	.0 3.6	1.1	.0 5.4	14.1	13.7 14.5
83	Hansen's One Grade	75.9	73.2 78.6	.8	.5 1.2	1.6	.9 2.4	3.2	.4 8.3	----	----	14.1	13.7 14.5

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
				1/8 INCH OR MORE		LESS THAN 1/8 INCH		1/8 INCH OR MORE		LESS THAN 1/8 INCH			
		(Haugh units)		RE-GRESSED MEAN		LSD* RANGE		RE-GRESSED MEAN		LSD* RANGE		RE-GRESSED MEAN	

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
				1/8 INCH OR MORE		LESS THAN 1/8 INCH		1/8 INCH OR MORE		LESS THAN 1/8 INCH			
		(Haugb units)		(%)		(%)		(%)		(%)		(1/1000 inch)	
		RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
111	Kimber K 141	73.2 75.9	0.8 1.6	1.4 2.1	3.0	0.0 0.4	3.0	0.0 0.4	3.0	0.0 0.4	3.0	14.3 14.7	15.1
112	Kimber K 155	76.8 79.5	.6 1.4	1.0 1.7	2.5	.0 1.1	4.5	.0 1.1	4.5	.1 2.4	7.9	13.9 14.3	14.7
263	Kingstowne RIR	76.6 79.3	.6 1.3	1.2 2.1	3.0	3.4 8.7	16.1	9.1 18.1	29.1	13.5 13.9	14.3		
227	Klongland K Cross	71.4 74.1	.4 1.1	1.2 2.0	2.8	.0 .9	4.3	.0 2.0	7.1	13.3 13.7	14.1		
299	Kruger's Egg Champ	76.0 78.7	.6 1.3	1.1 1.8	2.5	5.0 11.1	19.2	13.8 14.2	14.6				
521	Lambert Gold Cross	77.8 80.5	.6 1.3	1.5 2.3	3.2	4.5 10.4	18.2	11.2 20.8	32.3	13.5 13.9	14.3		
117	Lawton Buff Sex Link	75.4 78.1	.6 1.4	1.4 2.1	3.0	4.3 10.1	17.9	16.6 27.5	39.8	13.5 13.9	14.3		
235	Leader 8 X	76.0 78.7	.6 1.3	1.2 1.9	2.8	.0 .6	3.6	.0 1.2	5.7	13.7 14.1	14.5		
278	Leader 10 X	75.2 78.0	.6 1.3	1.2 2.0	2.8	.0 .6	3.6	.0 1.2	5.7	13.5 13.9	14.3		
229	Leader 14 X	76.8 79.5	.7 1.5	1.1 1.9	2.7	.0 1.2	4.8	.1 2.6	8.3	14.1 14.5	14.9		
522	Lone Pine RIR x LS	76.5 79.2	.6 1.3	1.1 1.8	2.6	5.1 11.3	19.4	10.8 20.2	31.7	13.8 14.2	14.6		
124	Lux H-D-6	74.2 77.0	.8 1.7	1.4 2.3	3.1	.0 .6	3.5	.0 .3	3.3	13.8 14.2	14.6		
551	MacDonald Breed Cross	73.2 75.9	.7 1.5	1.8 2.7	3.7	1.1 4.7	10.6	4.2 11.1	20.5	13.4 13.8	14.2		
525	Manitoba Keyline 110	76.0 78.7	.7 1.4	1.1 1.8	2.6	.0 1.3	5.0	.0 1.1	5.5	13.6 14.0	14.4		
539	Manitoba Keyline 110 A	76.8 79.5	.6 1.4	1.3 2.1	3.0	.0 1.3	5.0	.0 1.6	6.4	13.7 14.1	14.5		
524	Manitoba Keyline 230	75.8 78.5	.6 1.3	1.5 2.4	3.3	3.2 8.4	15.6	8.4 17.1	27.9	13.8 14.2	14.6		
294	Maple Dale #253	75.0 77.7	.5 1.2	1.3 2.1	3.0	.0 .1	2.1	.0 .9	5.1	13.9 14.3	14.7		
126	Mathews M 138	75.5 78.2	.7 1.4	1.2 1.9	2.7	.0 .6	3.6	.0 1.3	5.9	13.8 14.2	14.6		
549	McIsaac Electric	75.5 78.2	.4 1.1	1.0 1.7	2.5	.4 3.2	8.3	.9 5.1	12.3	13.6 14.0	14.4		
548	McIsaac Electric 220	74.3 77.0	.6 1.3	1.1 1.8	2.6	1.2 4.9	10.9	4.2 11.1	20.5	13.5 13.9	14.3		
133	Merryknoll 400	70.4 73.1	.6 1.4	2.1 3.0	4.0	.2 2.5	7.2	11.8 21.5	33.1	-----	-----		

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
		(Haugh units)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		(1/1000 inch)	
		RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
555	Nelson's RIR x LS	78.5	75.8 81.2	1.2	0.8 1.6	3.1	2.1 4.1	5.4	1.4 11.6	18.1	9.1 29.1	13.9	13.5 14.3
139	Niles WL	78.7	76.0 81.4	1.0	.6 1.4	1.7	1.0 2.5	.4	.0 2.9	----	----	14.5	14.1 14.9
140	Niles Commercial	75.1	72.4 77.8	1.0	.6 1.4	1.9	1.2 2.7	.3	.0 2.6	----	----	13.7	13.3 14.1
526	Noble N-60	77.9	75.2 80.6	1.1	.7 1.4	1.9	1.2 2.8	1.1	.0 4.5	1.4	.0 6.1	14.2	13.8 14.6
302	Norco Grade AA	78.9	76.2 81.6	1.0	.7 1.4	1.8	1.1 2.6	.5	.0 3.2	----	----	14.0	13.6 14.4
143	Norris Efficiency Leghorns	79.4	76.7 82.1	1.0	.6 1.3	1.8	1.1 2.7	.6	.0 3.6	1.2	.0 5.7	13.9	13.5 14.3
157	No. Cent. Regional Random Bred Cross	76.7	74.0 79.4	1.0	.6 1.4	1.8	1.1 2.6	13.2	6.5 21.7	----	----	14.0	13.6 14.4
257	No. Cent. Regional Random Bred Red	79.0	76.3 81.7	1.0	.6 1.3	2.1	1.3 3.0	9.2	3.7 16.8	15.8	7.4 26.3	13.6	13.2 14.0
528	Ontario Agr. College Strain Cross	78.5	75.8 81.2	.9	.5 1.2	1.5	.9 2.2	.7	.0 3.7	.9	.0 4.9	14.0	13.6 14.4
145	Ottawa Cent. Expt. Random Bred	78.8	76.1 81.5	1.1	.7 1.4	2.3	1.5 3.2	1.1	.0 4.7	1.3	.0 5.8	14.1	13.7 14.5
228	Parmenter Reds PM 1	78.3	75.6 81.0	1.0	.6 1.3	1.0	.5 1.6	11.1	5.0 19.2	26.7	15.9 38.9	13.7	13.3 14.1
151	Peerless 262	78.2	75.5 80.9	.9	.5 1.2	1.9	1.1 2.7	.2	.0 2.3	2.8	.1 8.7	14.1	13.7 14.5
152	Penna. F. B. LSC 55	80.2	77.5 82.9	1.0	.6 1.3	2.0	1.2 2.8	2.1	.1 6.4	1.2	.0 5.7	14.0	13.6 14.4
234	Penna. F. B. LSC 60	79.5	76.8 82.2	1.0	.7 1.4	1.5	.9 2.3	.6	.0 3.6	1.2	.0 5.7	13.9	13.5 14.3
154	Pillsbury Maxi-Lay Queens	80.8	78.1 83.5	1.0	.6 1.4	2.1	1.3 2.9	.0	.4 1.8	.8	.0 4.7	14.1	13.7 14.5
301	Pollard Silver X Leghorn	77.8	75.1 80.5	1.0	.7 1.4	1.9	1.2 2.8	.6	.0 3.4	----	----	13.9	13.5 14.3
538	Purdy Triline	77.8	75.1 80.5	1.1	.7 1.4	2.1	1.3 3.0	3.1	.4 8.1	5.3	1.0 12.5	14.4	14.0 14.8
159	Randall CG x WL	77.9	75.2 80.6	1.0	.7 1.4	1.9	1.2 2.8	.3	.0 2.7	----	----	13.9	13.5 14.3
160	Rapp Linecross	76.7	74.0 79.4	1.3	.8 1.7	1.5	.8 2.2	.5	.0 3.4	.7	.0 4.5	14.2	13.8 14.6
530	Raynor R-60	76.7	74.0 79.4	.8	.4 1.1	1.8	1.1 2.6	1.8	.0 5.9	3.0	.2 8.9	14.2	13.8 14.6
164	Richardson Commercial	73.1	70.4 75.8	.9	.6 1.3	1.8	1.1 2.6	3.1	.4 8.2	----	----	14.0	13.6 14.4

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS	
		(Haugh units)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		(1/1000 inch)	
		RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE	RE-GRESSED MEAN	LSD* RANGE
165	Richardson Commercial MWA	70.7	.5	.8	1.1	1.9	2.7	.2	----	----	----	14.2	15.0
		73.4	76.1	.8	1.1	1.9	2.7	2.6	7.4	----	----	14.6	15.0
249	Riddle Spring Super-Triway	75.8	.4	.7	1.0	1.5	2.2	4.7	9.2	----	----	----	----
		78.5	81.2	.7	1.0	1.5	2.2	10.6	18.5	18.2	29.2	----	----
300	Santa Clara CG x WL	71.6	.5	.9	1.2	2.0	2.8	.0	----	----	----	13.6	14.4
		74.3	77.0	.9	1.2	2.0	2.8	.2	2.3	----	----	14.0	14.4
531	Scattered Acres Hanover 30	74.7	.7	1.0	1.4	2.0	2.8	.0	.0	2.3	7.7	14.1	14.5
		77.4	80.1	1.0	1.4	2.0	2.8	1.1	4.5	2.3	7.7	14.1	14.5
176	Schaible Commercial 2	75.2	.7	1.1	1.5	1.7	2.5	.0	.0	1.9	7.0	14.1	14.5
		77.9	80.6	1.1	1.5	1.7	2.5	.3	2.7	1.9	7.0	14.1	14.5
295	Schaible K Cross	77.1	.7	1.1	1.5	1.8	2.6	.0	.0	.2	2.8	14.2	14.6
		79.8	82.5	1.1	1.5	1.8	2.6	.3	2.8	.2	2.8	14.2	14.6
178	Schildmeyer's Commercial	70.1	.7	1.1	1.5	2.1	3.0	.0	----	----	----	13.6	14.4
		72.8	75.5	1.1	1.5	2.1	3.0	.6	3.5	----	----	14.0	14.4
297	Schildmeyer's S-44	71.5	.6	1.0	1.3	2.0	2.9	.0	----	----	----	13.8	14.6
		74.2	76.9	1.0	1.3	2.0	2.9	.2	2.3	----	----	14.2	14.6
547	Searle Red Cross	76.6	.7	1.0	1.4	2.6	3.6	.9	5.8	13.4	23.4	13.8	14.2
		79.3	82.0	1.0	1.4	2.6	3.6	4.3	9.9	13.4	23.4	13.8	14.2
181	Shaver Starcross 288	74.4	.4	.8	1.1	2.0	2.8	.0	.0	2.1	7.3	14.2	14.6
		77.1	79.8	.8	1.1	2.0	2.8	1.0	4.3	2.1	7.3	14.2	14.6
236	Shaver 3-W	75.2	.7	1.1	1.5	1.9	2.8	.0	.0	1.2	5.7	14.2	14.6
		77.9	80.6	1.1	1.5	1.9	2.8	.6	3.6	1.2	5.7	14.2	14.6
536	Smith 501 x 507	70.2	1.0	1.4	1.9	2.4	3.4	.0	.4	3.6	10.0	14.0	14.4
		72.9	75.6	1.4	1.9	2.4	3.4	.2	2.6	3.6	10.0	14.0	14.4
533	Starline Pearllette	71.7	.6	1.0	1.4	1.5	2.2	.0	.1	2.9	8.8	14.2	14.6
		74.4	77.1	1.0	1.4	1.5	2.2	1.2	4.7	2.9	8.8	14.2	14.6
282	Stever 303	72.7	.7	1.1	1.5	2.0	2.9	.0	.0	1.2	5.7	14.1	14.5
		75.4	78.1	1.1	1.5	2.0	2.9	.6	3.6	1.2	5.7	14.1	14.5
251	Stone 158	76.5	.8	1.2	1.6	2.1	3.0	.0	.0	.9	5.1	14.4	14.8
		79.2	81.9	1.2	1.6	2.1	3.0	.7	3.7	.9	5.1	14.4	14.8
190	Stone's H 56	76.1	.6	1.0	1.4	2.0	2.8	.0	----	----	----	13.7	14.5
		78.8	81.5	1.0	1.4	2.0	2.8	.2	2.5	----	----	14.1	14.5
196	Sunnyside Wisco White	70.2	.5	.9	1.2	1.8	2.6	.0	.0	2.0	7.1	14.1	14.5
		72.9	75.6	.9	1.2	1.8	2.6	.4	3.2	2.0	7.1	14.1	14.5
197	Swift & Co. Ski-Hi 316	74.1	.8	1.2	1.7	2.4	3.3	.0	.0	1.0	5.2	14.2	14.6
		76.8	79.5	1.2	1.7	2.4	3.3	.3	2.6	1.0	5.2	14.2	14.6
199	Townline SC 30	75.3	.8	1.2	1.6	2.2	3.0	.0	.0	1.3	5.9	14.0	14.4
		78.0	80.7	1.2	1.6	2.2	3.0	.5	3.3	1.3	5.9	14.0	14.4
556	Triska Belmont 292	75.3	.8	1.2	1.7	2.0	2.8	.0	.0	2.1	7.4	14.0	14.4
		78.0	80.7	1.2	1.7	2.0	2.8	.8	4.0	2.1	7.4	14.0	14.4
534	Triska Belmont 292A	72.8	.7	1.1	1.4	2.0	2.8	.0	.0	1.3	5.8	14.4	14.8
		75.5	78.2	1.1	1.4	2.0	2.8	.8	4.1	1.3	5.8	14.4	14.8

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.

All Stocks Entered, with Regressed Means and LSD Range for each Trait (Continued)

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY  (Haugh units)		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS  (1/1000 inch)	
				1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)			
		RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE	RE- GRESSED MEAN	LSD* RANGE
231	Truway Trubred #21	76.9 79.6	.6 1.4	1.3 2.9	.0 .6	.0 3.6	13.9 14.3	14.7					
201	Univ. of Missouri Intra Flock	73.8 76.5	.7 1.5	1.3 2.9	.0 1.3	.0 5.0	13.7 14.1	14.5					
202	Vancrest All Red	77.4 80.1	.6 1.4	1.1 2.6	----- -----	----- -----	13.4 13.8	14.2					
261	Ward Wardcrost 356	74.4 77.1	.5 1.2	1.2 2.8	.0 1.4	.1 5.2	14.0 14.4	14.8					
42	Warren Warren-Darby DX	75.1 77.8	1.2 2.2	1.6 3.3	.0 .5	.0 3.3	13.9 14.3	14.7					
250	Warren Warren J-J	71.0 73.7	.8 1.6	1.0 2.5	.0 .2	.0 2.4	13.8 14.2	14.6					
208	Warren Sex-Sal-Link	74.1 76.8	.3 .8	.5 1.6	7.5 14.5	12.0 23.4	13.0 13.4	13.8					
305	Warren Sex-Sal-F	76.9 79.6	.5 1.2	1.2 2.8	3.5 8.8	8.1 16.2	13.5 13.9	14.3					
210	Webster Certified	77.8 80.5	.5 1.2	1.2 2.7	----- -----	----- -----	13.3 13.7	14.1					
272	Wells Black Sex-Link	73.9 76.6	.5 1.2	1.0 2.4	2.7 7.6	20.5 14.6	----- 32.0	----- 44.7					
212	Welp's 901	78.8 81.5	.6 1.4	.9 2.2	.1 2.0	.4 6.3	13.7 14.1	14.5					
290	Welp's 937	74.3 77.0	.6 1.3	.8 2.2	.0 .0	.0 1.7	13.5 13.9	14.3					
298	White CG x WL	75.4 78.1	.4 1.1	1.2 2.8	.0 .5	----- 3.2	13.1 13.5	13.9					
217	Wirtz Linecross	74.6 77.3	.7 1.4	1.3 2.9	.0 1.5	.0 5.4	13.8 14.2	14.6					
280	Wolf's B-J	76.3 79.0	.5 1.2	1.1 2.7	.0 .6	.0 3.6	13.7 14.1	14.5					
219	Wood Commercial	75.2 77.9	.3 .9	.9 2.3	1.8 6.1	----- 12.6	13.7 14.1	14.5					
284	Zewan Strain B	73.6 76.3	.6 1.3	1.7 3.5	.0 .6	.0 3.6	13.8 14.2	14.6					

\* If the regressed mean of another stock falls within this LSD range, these two stocks are not significantly different at the 5% level.



Stocks Entered in 1961-62 Random Sample Egg Production Tests  
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Ala.	Ark.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	G. N. Y.	W. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
3	Allstate	LX 330	4																			X		X
5	Ames	Ames 424	7																			X		X
7	Ames	Ames 434 R	6				X																	
8	Ames	Ames 505	4				X																	
537	Andrews	Polka Dot	2					X																
10	Anthony	Anthony	6																					
503	Appleby	Life Line	2																					
138	Arbor Acres	Arbor Acres Queen	12				X																	
540	Arnold	Hybrid 255	2																					
541	Austin	Austin	1	X																				
232	Avery	Flock Mating	2																					
13	Babcock	Bessie	8																					
237	Babcock	Bonnie	16				X																	
505	Balakshin	Balakshin Leghorn	2																					
17	Ball	551	1																					
293	Ball	551 A	1																					
259	Ball	591	1																					
233	Ball	592	1																					
269	Baumgartner	408	1																					
20	Beamsdale	Beamsdale 66	2																					
22	Booth	Booth Line 351	1																					
230	Breder	Money Maker #1	11																					
506	Buchanan	Kanaka White	2																					
291	Buck Hill	Sex Link	1																					
26	Bundesen	Graycie	1																					
553	Burpee	Burpee	1																					
544	Burpee	No. 1	2																					
554	Bustin	Bustin's	1																					
283	Cameron	#924	1																					
30	Carey	Carey Nicks	1																					
287	Carey	3-C	1																					
292	Carey	E. J. 's	1																					
31	Cashman	Hi-Cash	6																					
304	Cashman	Astronauts	1																					
32	Childers	Childers	1																					
507	Clark (N. B.)	Clark's 41	1																					
545	Clark (N. B.)	Clark's 45	2																					

Stocks Entered in 1961-62 Random Sample Egg Production Tests - Continued  
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Ariz.	Ark.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	W. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
550	Clark (N. B.)	Clark's 541	1												X										
508	Clark (Man.)	Paymaster 101	1						X																
34	Colonial	Best Egg Grade	1											X											
35	Colonial	True Line 365	7					X																	
289	Colonial	True-Line 365 B	2			X							X												
546	Co-op	Gross	1																						
37	Cornell	Random Bred	12			X																			
510	Couvoir	Corvette	4												X										
542	Couvoir	LaChateauguay	1						X																
511	Dawson	Series 1000	1						X																
45	DeKalb	DeKalb 101	2																						
48	DeKalb	DeKalb 131	10																						
277	DeKalb	DeKalb 151	7																						
256	Del Rio	Del Rio	1																						
51	Demler	Demler	3																						
52	Demler	Demler Kross	3																						
254	Demler	Demler IBX	7																						
513	deZeeuw	601	1																						
514	deZeeuw	752	3																						
270	Dryden	Gray X Leghorn	2																						
271	Dryden	SX 60	3																						
55	Eby's	Grade #1	2																						
59	Erath	Erath Str. X	3																						
517	Evans	Echo Leghorns	3																						
518	Fisher	103	2																						
60	Fletcher	FX 100	1																						
246	Foragate	FF 160	1																						
245	Foragate	FF 166	1																						
258	Foragate	Foragate	2																						
65	Garber	Garber	1																						
66	Garber	G 200	1																						
253	Garber	G 300	1																						
281	Garber	G 400	2																						
69	Garrison	Golden Sex Link	1																						
255	Garrison	Garrison X 300	1																						
70	Gasson	G 33	3																						
72	Hostley	Hostley Pearl	15																						

Stocks Entered in 1961-62 Random Sample Egg Production Tests - Continued  
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Ala.	Ariz.	Ark.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	W. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
296	Goetz	Goetz	1														X				X				
243	Good's	Good's	1																						
552	Goodine	Goodine	1												X						X				
75	Great Plains	Egg Master	1											X											
76	Great Plains	Golden Cross	1																						
543	Groupe Maska	Corvette 303	1						X																
520	Groupe Oka	Oka 39	1						X																
80	Hansen (Wash.)	Criss Cross H-25	8		X			X						X							X				X
82	Hansen (Wash.)	Criss Cross 61	1			X																			
83	Hansen (Calif.)	One Grade	1					X																	
84	Hanson	Super Nick	2					X																	
225	Harco	Sex Link	5					X								X									
86	Hardy	Sex Link	1					X								X									
88	H & N	H & N Nick Chick	18		X	X	X	X		XXX	X	X	X	X				X		X	X		X	XX	X
252	H & N	H & N Mark II	8	X	X					X															
275	H & N	Breed Cross	1					X																	
279	Hill Top	285 A	1																						
91	Hogsett	Hogsett	1					X																	
92	Honegger	Honegger Layer	15			X	X	X		XX		X	X	X			X	X		X		X	X	X	X
93	Honegger	Honegger Layer H-62	3																						
288	Honegger	H-562	1																						
276	Hubbard	Comet	4													X									
99	Hy-Line	934-C	6		X	X	X	X					X	X		X	X	X	X	X	XX	X	X	XXX	X
240	Hy-Line	934-H	22		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	XX	X	X	XXX	X
286	Hy-Line	950	2							X	X			X											
101	Ideal	H-3-W	15			X	X	X						X							X	X	X	XXX	X
303	Ideal	Ideal Cross	3			X	X							X											
285	Kahn	Kahn	1											X											
108	Kerr	409-C	1											X											
109	Keystone	Park's Keystone	2															X			X				
110	Kimber	K 137	15		X			X		XX	X	X	X	X				X		X	X	X	X	X	X
111	Kimber	K 141	1					X																	
112	Kimber	K 155	9		X		X			X				X			X				X	X	X	X	X
263	Kingstowne	Kingstowne	1																						
227	Klongland	K Cross	1																						
299	Kruger's	Egg Champ	1					X																	
521	Lambert	Gold Cross	1						X																

Stocks Entered in 1961-62 Random Sample Egg Production Tests - Continued  
(Listed Alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Ark.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	W. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
117	Lawton	Buff Sex Link	3												X			X		X				
235	Leader	8X	1															X	X	X				
278	Leader	10X	2															X						
229	Leader	14X	1													X								
522	Lone Pine	Lone Pine	1					X																
124	Lux Leghorn	H-D-6	3										X				X							X
549	McIsaac	Electric	1											X										
548	McIsaac	Electric 220	1											X										
551	MacDonald	MacDonald	1											X										
524	Manitoba	Keyline 230	1					X						X										
539	Manitoba	Keyline 110A	1					X																
525	Manitoba	Keyline 110	2			X		X																
294	Maple Dale	#253	1								X													
126	Mathews	M 138	1																					
133	Merryknoll	Merryknoll 400	1												X									X
555	Nelson	Nelson's	1											X										
139	Niles	Niles	1				X																	
140	Niles	Commercial	1				X																	
526	Noble	N-60	1				X	X																
302	Norco	Grade AA	1				X																	
143	Norris	Efficiency Leghorns	1																					
257	N. Cen. Reg. Lab.	Random Bred - Red	1																	X				
157	N. Cen. Reg. Lab.	Random Bred - Cr.	1				X																	
528	Ontario Agr. College	Strain Cross	1			X																		
145	Ottawa Cen. Exp.	Random Bred	3					XX										X						
228	Parmenter	PM #1	3												X				X					
151	Peerless	Peerless 262	2				X						X											
152	Penna. F. B.	LSC 55	2														X		X	X				
234	Penna. F. B.	LSC 60	1																					
154	Pillsbury	Maxi-Lay Queen	3				X					X												
301	Pollard	Silver X Leghorns	1				X																	
538	Purdy	Triline	1					X																
159	Randall	Randall	1				X																	
160	Rapp	Rapp Linecross	10			X			X	X												X		
530	Raynor	Raynor R-60	2					X																X
164	Richardson	Commercial	1				X																	
165	Richardson	Commercial MWA	1				X																	



Stocks Entered in 1961-62 Random Sample Egg Production Tests - Continued  
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Ariz.	Ark.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	W. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
249	Riddle Springs	Super-Triway	1													X									
300	Santa Clara	Santa Clara	1																						
531	Scattered Acres	Hanover 30	1					X										X			X				
295	Schaible	K Cross	6											X			X				X				
176	Schaible	Commercial 2	2																		X				
178	Schildmeyer	Commercial	1					X																	
297	Schildmeyer	S-44	1					X																	
547	Searle	Red Cross	1					X							X						X				
181	Shaver	Starcross 288	14	X			X	X	X		X			X	X		X				X	X			X
236	Shaver	3-W	1																						
536	Smith	501 X 507	1				X																		
533	Starline	Pearlette	2	X					X																
282	Stever	303	1																		X				
190	Stone (Calif.)	H-56	1					X																	
251	Stone (Minn.)	Stone 158	1										X												
196	Sunnyside	Wisco White	1																						X
197	Swift	Ski-Hi 316	2										X											X	
199	Townline	SC 30	2											X							X				
534	Triska	Belmont 292A	1	X																					
556	Triska	Belmont 292	3	X			X		X																
231	Truway	Trubred #21	2																						
201	Univ. of Missouri	Intra Flock	1											X											
202	Vancrest	All Red	1																X						
261	Ward	Wardcross 356	1																						
42	Warren	Warren Darby DX	7			X																	X		X
305	Warren	Sex-Sal-F	1																			X			
208	Warren	Sex-Sal-Link	5					X								X				X					X
250	Warren	Warren JJ	2				X	X													X				
210	Webster	Certified	1																						
272	Wells	Black Sex-Link	1													X									
212	Welp's	Welp 901	1			X																			
290	Welp's	Welp 937	3		X																				
298	White	White	1				X	X			X														
217	Wirtz	Linecross	1																						
280	Wolf's	B-J	1																		X				
219	Wood	Commercial	1					X																	
284	Zewan	Strain B	1																						X

This summary includes performance data on 185 stocks entered in 22 Random Sample Egg Production Tests for 1961-62. These tests were conducted at 49 different locations. However, only 17 of the 49 locations reported data on all of the 16 traits. Tests that were not included in the computation of the regressed means for each of the 16 traits are shown under the heading "Tests Not Included" in the tabulation on pages 42 and 43. All data reported were included in the combined analysis.

The performance data were reported by replicate pens by all tests with replicates. Replicate data reported from six tests were based on less than 40 birds housed per pen. In these tests, the simple average of all replicates reported by each test was used as the pen average for the combined analysis. This was done in order to more nearly equalize the variance among pens throughout all tests. Data for seven traits were reported on 1009 pens for the 185 stocks; other traits were reported on a smaller number of pens. The number of pens and the number of stocks tested at each of the 49 locations are given in the first two columns of the table on page 40.

The replicate data were analyzed by least-squares procedures to obtain the test adjustment factors (pages 40 and 41) and the repeatability estimates and the correlation among replicates within tests for each trait (pages 42 and 43). In order to place the results for all traits on a comparable environmental basis, the adjustment factors to adjust for test differences were expressed as a plus or minus deviation from the average for the 17 locations which reported complete performance information. These factors were then used to adjust the simple stock average for test differences to obtain the test adjusted stock averages (least-squares stock means). The adjusted stock averages were then regressed toward the overall mean ( $\bar{\mu}$ ) to account for variations in number of tests entered and number of replicates per test.

As the name implies, the least significant difference figures (LSD <sup>1/</sup>) prescribe the approximate limits of difference that may be due to chance. Differences that equal or exceed the LSD probably are due to inherent differences in the stocks. The LSD is a reliable guide for the appraisal of differences but it is not infallible. Appraisals of differences, based on comparison with the LSD may be wrong and the probability of such errors are considered in computing the LSD.

The percentage data for the seven traits, growing mortality, laying mortality, large blood spots, small blood spots, large meat spots, small meat spots and percent large and extra large eggs were converted to angles with the arc sin transformation prior to the analysis. The test adjustment factors, repeatability, the correlation among replicates, the test adjusted stock averages, the overall mean ( $\bar{\mu}$ ), the regressed means and the LSD range values were all computed with the transformed percentages for these seven traits. However, the test adjustment factors shown in the table on pages 40 and 41 and the regressed means and LSD range values shown for these traits in the alphabetic listing of stocks are given in percent. The angular transformation for these traits causes the difference between the regressed mean and the low LSD range value to be different from the difference between the regressed mean and the high LSD range value. The LSD range for these traits may be used in the same manner as the LSD range for other traits to aid in the evaluation of differences among stocks but will result in some slight inconsistencies when comparisons are made both ways.

The exact coefficients of the variance component for the interaction in the mean squares for interaction and stocks were computed this year. Although this seemed to make only a small amount of difference in the variance component estimates, it did allow a slight bias to be removed.

---

<sup>1/</sup> The least significant differences (LSD) referred to in this report were computed from the approximate standard error of the regressed mean and the significant studentized range value for 20 means as given in Duncan's table for the 0.05 probability level. The approximate standard error was obtained by simply averaging the individual standard errors for each regressed mean. The regression of the means removes most of the variation among stocks in these standard errors.

By restricting the number of birds per pen to about 40 birds or more, most of the variance components for error ( $\hat{\sigma}_e^2$ ) were smaller this year than last year. In general, this should have resulted in the repeatability being higher this year also. However, the stock by test interaction is becoming relatively more important each year for some traits but less important for other traits. This may be due to the elimination of many of the poorer stocks so that the variance component for stocks ( $\hat{\sigma}_s^2$ ) is generally becoming smaller while the interaction variance component ( $\hat{\sigma}_{st}^2$ ) remains about the same. Hence, the overall effects caused only seven of the 15 common traits to show a higher repeatability this year than last year. The average difference between the correlation among replicates and repeatability was .152 last year and .124 this year for these same 15 traits. (See ARS 44-79-2 for 1960-61 data)

The formula used to compute the regressed means is:

$$\text{Regressed Mean} = \hat{\mu} + \frac{r/C}{1 + (k-1)x + \left(\frac{1-Ck}{C}\right)r} (\hat{s})$$

where:

- $\hat{\mu}$  = the average of the test adjusted stock means.
- $r$  = repeatability.
- $x$  = the correlation among replicates.
- $k$  = the average number of replicates per test.
- $C$  = the diagonal inverse element for that stock. The reciprocal of  $C$ , i.e.,  $\frac{1}{C}$ , is equal to  $nk$  if the assumption is made that the adjustments for test effects are made without error; where  $n$  is the number of tests entered.
- $\hat{s}$  = the test adjusted stock average minus the overall mean ( $\hat{\mu}$ ).

The following terms and their definitions should be of help in interpreting the analytical procedures.

Overall Mean:	The average of the test adjusted means for all stocks. This estimates what the overall average would have been if all stocks had been entered in all of the 17 locations which reported data on all 16 traits.
Range:	The range represents the difference between the maximum and minimum performance among the 185 stocks, based on the regressed means.
Repeatability:	This figure can vary from 0.00 to 1.00. The higher the figure the greater is the likelihood of stocks ranking in the same order from one test to another.
Correlation Among Replicates:	This correlation measures the repeatability among replicates of the same stock in the same test. It may vary from 0.00 to 1.00 but can not be lower than the repeatability of stock performance between tests. The higher the correlation among replicates the less need there is for replication of stocks within tests. The amount of difference between repeatability and the correlation among replicates is a measure of the importance of the test by stock interaction.
Test Adjustment Factor:	The amount by which a given location was above or below the average of the 17 locations which reported data for all 16 traits. These factors were determined on an intra-stock basis with a least-squares analysis.
Regressed Mean:	The test adjusted stock mean after weighting it according to the number of locations in which the stock was entered, the number of replicates per location, the repeatability and the correlation among replicates at the same location.
Least Significant Difference:	The LSD prescribes the approximate limit of difference that may be due to chance. This has been computed at the 5% level of significance and may be expressed as odds of 19:1 against differences as large as the LSD being due to chance alone.
LSD Range:	These figures represent the regressed mean of a stock, plus and minus the LSD at the 5% level (less one unit of measurement). For an explanation of how these were computed for the low percentage traits, refer to the text above.



The Adjustment Factors Used to Adjust for Test Differences

Test	No. Pens	No. Stocks Tested	% Mortality Growing Period	% Mortality Laying Period	Days of Age at 50% Production	Egg Production Hen-Housed - No.	Egg Production Hen Day - %	Income Over Feed and Chick Cost - \$	Feed Per 24 Oz. of Eggs - Lbs.
Alberta	22	11	+0.78	+2.68	+ 6.83	-20.14	+ 0.83	-0.05	-0.09
Arizona	8	8	-0.02	-0.15	+ 0.91	- 2.48	+ 1.57	-0.24	0.00
Arkansas Conventional	32	16	-1.73	+0.09	-11.15	+13.36	+ 2.33	+0.04	-0.28
Arkansas Controlled	32	16	---	0.00	---	+20.37	+ 3.76	+0.09	-0.33
British Columbia	40	20	0.00	-1.09	- 9.17	+36.74	+ 9.64	+0.36	-0.09
California Cage	50	50	---	+0.20	- 8.19	-25.50	+ 1.36	---	---
California Floor	100	50	+0.86	+0.49	+ 4.70	-56.40	- 4.26	-1.46	+0.34
Central Canada	68	33	+0.34	-2.70	- 8.90	+19.82	- 1.54	+0.45	+0.17
Florida	48	19	-0.03	+0.17	+ 7.85	-11.21	- 1.83	-0.37	+0.31
Iowa #1	8	4	-1.62	+1.18	+ 6.12	+34.11	+10.30	---	---
Iowa #2	8	4	-2.88	-3.47	+ 4.15	+50.58	+10.88	---	---
Iowa #3	8	4	-2.92	+1.13	-34.18	+49.59	+ 8.47	---	---
Iowa #4	4	4	-8.06	+0.13	+ 9.65	+30.26	+ 9.63	---	---
Iowa #5	8	4	-4.42	+0.11	- 0.02	+29.42	+ 6.61	---	---
Iowa #6	8	4	-2.03	+1.26	- 1.39	+ 2.15	- 1.10	---	---
Iowa #7	8	4	-8.19	-0.16	- 1.44	+11.50	- 0.92	---	---
Iowa #8	8	4	-6.31	-0.12	+ 0.09	+ 9.51	- 0.87	---	---
Iowa #9	8	4	-2.02	-0.81	+ 8.51	+43.99	+ 9.71	---	---
Iowa #10	8	4	-1.83	-4.61	+ 4.30	+85.59	+21.65	---	---
Iowa #11	8	4	-5.74	+0.14	-62.13	+49.09	+ 5.68	---	---
Iowa #12	8	4	-1.39	-0.05	-36.70	+29.91	- 2.03	---	---
Iowa #13	8	4	0.00	+0.56	+ 3.45	+50.99	+16.70	---	---
Iowa #14	8	4	-2.43	-2.15	- 6.32	+45.38	+ 9.09	---	---
Iowa #15	8	4	-1.14	-0.43	- 7.11	+43.09	+ 8.22	---	---
Iowa #16	8	4	-3.62	+1.50	- 7.29	+24.19	+ 5.51	---	---
Iowa #17	8	4	-3.17	-1.38	-10.42	+53.47	+12.34	---	---
Iowa #18	8	4	-4.70	-3.17	-20.64	+53.46	+ 4.17	---	---
Iowa #19	8	4	-0.98	+0.62	-15.03	+41.12	+ 9.48	---	---
Iowa # 20	8	4	-0.35	-1.34	- 7.42	+58.49	+12.83	---	---
Kansas Farm #1	8	8	-1.26	+1.20	+ 2.41	+27.11	+ 4.75	---	-0.55
Kansas Farm #2	8	8	-0.07	-0.10	+ 3.28	+26.50	+ 8.00	---	-0.58
Kansas Farm #3	8	8	-0.46	+0.04	- 6.84	+ 8.24	+ 2.25	---	+0.10
Kansas Farm #4	8	8	-3.84	-5.87	- 2.97	+44.24	+ 5.67	---	---
Minnesota #1	16	16	-0.26	+0.78	+ 5.29	- 9.70	- 1.84	-0.13	+0.06
Minnesota #2	16	16	-1.97	-0.04	+ 2.17	- 2.22	- 0.81	+0.21	-0.25
Missouri	50	50	+0.66	+0.62	- 8.09	-12.14	- 4.71	-0.04	+0.02
New Brunswick	32	16	+0.75	+0.56	+ 5.84	-20.35	- 4.20	-0.25	+0.44
New Hampshire #1	16	16	-0.02	-0.02	-23.96	+ 5.05	- 4.33	+0.24	-0.04
New Hampshire #2	16	16	-0.02	+1.88	-14.27	-14.62	- 4.71	-0.25	+0.11
New Hampshire #3	16	16	-0.23	+0.73	+ 1.73	+ 6.64	- 2.73	+0.22	+0.04
New Jersey	24	24	-1.23	-0.24	- 8.51	+ 9.33	+ 1.01	-0.38	+0.15
Central New York	22	22	0.00	+0.36	+ 1.84	-13.34	- 4.16	-0.62	+0.19
Western New York	22	22	+0.20	+1.15	- 2.46	-15.35	- 2.80	-0.47	-0.01
North Carolina	40	20	+0.66	-0.11	+ 4.88	-11.98	- 4.03	+0.39	+0.17
Pennsylvania	48	46	+0.07	+1.28	+12.09	-20.57	- 1.66	+0.15	+0.09
Rhode Island	20	20	+0.06	-0.10	- 6.78	-11.84	- 5.56	-1.26	-0.14
Tennessee	28	28	+0.24	-0.30	+ 3.42	+34.24	+11.09	+0.82	-0.89
Texas	30	24	-0.22	-0.26	+ 1.33	+19.69	+ 4.81	+0.42	+0.14
Wisconsin	25	25	+0.01	-0.22	+ 1.99	-10.56	- 5.10	-0.14	+0.19



The Adjustment Factors Used to Adjust for Test Differences

Test	Egg Weight - Oz.	% Large and Extra Large Eggs	Body Weight - Lbs.	Albumen Quality Haugh Units	% Blood Spots 1/8 Inch or More	% Blood Spots Less than 1/8 Inch	% Meat Spots 1/8 Inch or More	% Meat Spots Less than 1/8 Inch	Shell Thickness 1/1000 Inch
Alberta	-0.22	+0.73	-0.09	+2.36	-0.02	0.00	+0.57	+ 0.90	+0.71
Arizona	+0.32	+0.28	+0.52	-2.57	+0.43	+0.69	+0.29	+ 0.15	-0.39
Arkansas Conventional	-0.61	+0.07	+0.05	+5.06	+0.12	+0.40	-0.58	- 0.28	+1.03
Arkansas Controlled	-0.64	-0.23	+0.11	+6.27	+0.13	+0.10	-1.09	- 0.10	+1.03
British Columbia	+0.67	+0.04	+0.49	+5.07	+0.18	-0.04	+0.02	+ 0.06	+2.42
California Cage	-0.39	-3.18	-0.01	+3.14	-0.38	-0.52	-0.04	---	+0.35
California Floor	+0.12	-0.68	-0.08	+2.93	-0.22	-0.13	0.00	---	+0.73
Central Canada	-0.05	+1.18	+0.05	+6.97	-0.02	0.00	+0.33	0.00	+1.29
Florida	+0.48	0.00	0.00	-1.42	-0.07	+0.14	-0.39	+ 0.26	+0.05
Iowa #1	-1.00	-0.83	+0.28	-3.70	---	---	---	---	+0.37
Iowa #2	0.33	+0.01	+0.01	-4.24	---	---	---	---	-0.16
Iowa #3	0.89	-0.53	+0.32	-9.20	---	---	---	---	-0.02
Iowa #4	-0.19	+0.10	+0.10	-3.48	---	---	---	---	-0.19
Iowa #5	-0.11	+0.32	-0.13	-5.88	---	---	---	---	+0.04
Iowa #6	-0.99	-0.92	-0.52	-6.15	---	---	---	---	-0.33
Iowa #7	+0.17	+1.08	-0.01	-4.24	---	---	---	---	+0.32
Iowa #8	+0.31	+1.47	-0.07	-5.42	---	---	---	---	+0.10
Iowa #9	+0.61	+3.19	+0.01	-3.79	---	---	---	---	-0.54
Iowa #10	+1.14	-6.95	+0.17	-5.15	---	---	---	---	-1.29
Iowa #11	0.00	+0.60	+0.33	-5.89	---	---	---	---	+0.68
Iowa #12	-0.41	0.00	+0.25	-5.30	---	---	---	---	-0.20
Iowa #13	+0.21	+1.14	-0.18	-1.25	---	---	---	---	+0.38
Iowa #14	+0.69	+3.76	-0.05	-5.53	---	---	---	---	-0.06
Iowa #15	+0.06	+0.54	+0.11	-3.40	---	---	---	---	-0.21
Iowa #16	-0.60	-0.10	+0.26	-4.82	---	---	---	---	-0.08
Iowa #17	+0.61	+3.27	-0.14	-1.34	---	---	---	---	-0.33
Iowa #18	-0.23	+0.07	-0.27	-5.17	---	---	---	---	-0.08
Iowa #19	-0.54	-0.04	-0.05	-4.26	---	---	---	---	-0.59
Iowa #20	-0.04	+0.35	+0.26	-4.80	---	---	---	---	+0.10
Kansas Farm #1	-1.07	-0.53	+0.07	-0.78	-0.49	-0.05	-5.64	- 0.99	-0.97
Kansas Farm #2	-0.63	-0.03	+0.22	-0.47	-0.74	-0.33	-4.65	- 0.85	-0.77
Kansas Farm #3	-0.31	+0.03	+0.37	-3.28	-1.25	0.00	-3.12	- 0.56	-0.38
Kansas Farm #4	-0.78	-0.06	-0.10	-4.25	-0.96	0.00	-3.32	- 1.43	-0.77
Minnesota #1	-0.30	-0.83	-0.36	-3.76	+0.43	+0.78	0.00	+ 0.65	-1.23
Minnesota #2	+0.23	-0.02	-0.04	-3.84	+0.15	+1.08	0.00	+ 0.65	-1.03
Missouri	-0.10	-0.58	+0.47	-5.65	+0.03	-0.61	-0.81	-11.63	-0.08
New Brunswick	+0.51	+2.65	-0.22	+5.74	-0.26	-1.48	+0.71	+ 0.04	+1.45
New Hampshire #1	-0.15	+0.43	+0.13	+8.09	+0.05	-0.03	+0.34	0.00	--
New Hampshire #2	-0.54	0.00	+0.40	+7.77	+0.19	-0.04	+0.73	- 0.92	--
New Hampshire #3	-0.62	+0.02	-0.17	+5.36	0.00	-0.69	+0.09	- 1.94	--
New Jersey	+0.58	+0.22	-0.16	-4.93	+0.13	-0.05	+0.01	- 0.54	-4.78
Central New York	-0.69	0.00	-0.07	+0.57	-0.07	-0.23	---	---	+1.19
Western New York	-0.66	+0.42	-0.35	+1.65	-0.27	-0.22	---	---	+1.14
North Carolina	-0.72	-0.77	-0.31	-0.23	-0.21	-0.29	+0.07	- 0.02	-0.13
Pennsylvania	-0.03	+2.78	+0.01	+0.16	0.00	0.00	+0.23	+ 0.71	-0.62
Rhode Island	-0.16	-3.57	+0.10	+5.75	-0.03	0.00	-0.63	0.00	+0.08
Tennessee	-0.46	-2.63	-0.23	+3.22	-0.41	-0.32	+0.02	0.00	+0.67
Texas	-0.33	0.00	-0.18	-4.31	-0.08	+0.08	0.00	+ 0.31	-0.60
Wisconsin	+0.19	-0.22	-0.11	-7.62	-0.13	-0.15	-0.70	- 0.41	+1.17

## Analytical Data For The Traits Measured

Trait	Tests Not Included	Overall Means	Regressed Means		Repeat-ability	Correlation Among Replicates
			Min.	Max.		
Percent mortality to 150 days or subsequent age at housing	Arkansas(controlled), California(cage)	10.3	1.7	5.9	0.139	0.139
Percent laying house mortality computed from 150 days or subsequent age at housing to 500 days of age.	None	19.8	6.3	20.5	.201	.326
Days of age to 50% production calculated from the first day of the first two consecutive days of 50% production for living birds in the entry at that time.	Arkansas(controlled)	175	167	187	.332	.332
Number of eggs per pullet housed to 500 days of age.	None	213	174	238	.411	.585
Percent hen-day production from the time the birds reached 50% production to 500 days of age.	None	68.1	62.6	74.3	.366	.507
Income over feed and chick cost per pullet housed, with chick cost in 1,000 lots at hatch date adjusted for mortality (accidental deaths, sexing errors and missing chicks not included).	California(cage), Iowa & Kansas	2.05	1.18	2.63	.452	.636
Pounds of feed per 24 ounces of egg produced, computed from a bulk weighing of eggs one day every two weeks or at least 2 days a month at equal intervals.	California(cage), Iowa & Kansas (farm #4)	4.59	4.08	5.81	.618	.707
Average annual egg weight computed from bulk weighings at least every two weeks or two days a month at equal intervals.	None	25.0	23.9	26.4	.504	.659
Percent Large and Extra large eggs.	None	57.8	58.7	83.8	.445	.625
Body weight at end of test.	None	4.9	3.9	6.7	.853	.900
Albumen quality-Haugh Units measured on one day's eggs per quarter or every three months, at equal intervals, broken-out basis.	None	77.6	71.0	81.5	.562	.599
Percentage of eggs with (one or more) large blood spots 1/8 inch or more, computed from at least 3 days eggs per quarter, broken-out basis.	Iowa	5.7	.6	1.7	.093	.372
Percentage of eggs with (one or more) small blood spots less than 1/8 inch, computed from at least 3 days eggs per quarter, broken-out basis.	Iowa	8.1	1.0	3.1	.133	.493
Percentage of eggs with (one or more) large colored meat spots 1/8 inch or more, computed from at least 3 days eggs per quarter, broken-out basis.	Iowa, Central New York, & Western New York	7.0	.0	17.9	.609	.771

## Analytical Data For The Traits Measured

Trait	Tests Not Included	Overall Means	Regressed Means		Repeat-ability	Correlation Among Replicates
			Min.	Max.		
Percentage of eggs with (one or more) small colored meat spots less than 1/8 inch, computed from at least 3 days eggs per quarter, broken-out basis.	California (cage), California(floor), Iowa, Central New York and Western New York	10.7	0.1	33.3	0.742	0.803
Shell thickness by direct measurement to nearest 1/1000 inch from at least one breakout each quarter.	New Hampshire	14.0	13.2	14.7	.628	.674

## Starting Date, Ending Date, Number of Entries, Pullets per Entry and Length of 1961-62 Tests

Test	Starting Date	Ending Date	No. Entries	Pullets per Entry	Length of Test
Alberta	March 30, 1961	August 12, 1962	11	100	500 days
Arizona	April 24, 1961	September 6, 1962	8	75	500 days
Arkansas	April 2, 1961	August 15, 1962	16	200	500 days
British Columbia	March 31, 1961	August 13, 1962	20	90	500 days
California	March 8, 1961	September 18, 1962	50	128	560 days
Central Canada	March 29, 1961	August 11, 1962	34	110	500 days
Florida	March 25, 1961	August 7, 1962	24	100	500 days
Iowa	February 17 to April 14, 1961	July 2 to August 27, 1962	16	1000 (Approx.)	486 days
Kansas	March 6, 1961	July 19, 1962	8	575	500 days
Minnesota	March 30, 1961	August 12, 1962	16	160	500 days
Missouri	March 20, 1961	August 2, 1962	50	50	500 days
New Brunswick	March 31, 1961	August 8, 1962	16	116	495 days
New Hampshire	May 8, 1961	September 15, 1962	16	365	496 days
New Jersey	March 27, 1961	August 9, 1962	24	50	500 days
Central New York	February 24, 1961	July 9, 1962	22	50	500 days
Western New York	March 24, 1961	August 6, 1962	22	50	500 days
North Carolina	February 10, 1961	June 24, 1962	20	100	500 days
Pennsylvania	May 3, 1961	September 15, 1962	48	50	500 days
Rhode Island	May 3, 1961	September 15, 1962	20	52	500 days
Tennessee	April 9, 1961	August 22, 1962	28	45	500 days
Texas	February 28, 1961	July 13, 1962	30	48	500 days
Wisconsin	March 5, 1961	July 18, 1962	25	50	500 days

## QUARTILE RANKING

### INTRODUCTION

The performance of each entry in the 1961-62 Random Sample Egg Production Tests is reported as the quartile rank of the entry for the trait measured. These rankings are determined in the following manner. For each trait the entries in each test are aligned in descending order from the most desirable to the least desirable performance. The "mean" or average performance for the trait is then determined. All entries above the mean are in quartile 1 or 2 and those below the mean are in quartile 3 or 4. The dividing point for the entries above or below the mean is the midpoint of the range between the mean and the top or bottom entry. To illustrate:

The North Carolina test had a mean, or average of \$1.878 for Income over Feed and Chick Cost. The highest income figure was \$2.350 and the lowest was \$1.510. To arrive at the dividing point between the 1st and 2d quartiles, subtract the mean (\$1.878) from the highest income (\$2.350). The result \$0.472 was divided by 2 in order to get the midpoint of the range (\$0.236). This was subtracted from the highest income (\$2.350 - 0.236) to arrive at the dividing point (\$2.114) between the 1st and 2d quartiles. To arrive at the dividing point between the 3d and 4th quartiles, the same procedure was used except that the lowest income (\$1.510) was subtracted from the mean (\$1.878). These determinations for each trait and each test are tabulated on pages 46 through 50.

The breeders of the tested stocks are listed in alphabetical order and the performance of each entry of the stock is shown under the breeder's name. Each entry is also identified by the abbreviated name of the entrant. In some cases, the sample was drawn from a source other than the entrant's hatchery or supply flock. In such cases, the abbreviated name of the source is shown in parentheses following the entrant's name.

### LIST OF ENTRANTS OTHER THAN BREEDER OF STOCK

<u>Name and Address</u>	<u>Stock Entered</u>
Amstutz Hatchery, Somerset, Pennsylvania	H & N
Arizona State Hatchery, Tucson, Arizona	Kimber
Atwood Hatchery, Comanche, Texas	H & N
Babcock Hatchery, Inc., Lititz, Pennsylvania	Babcock
Bloomingdale Poultry Farm, Valrico, Florida	Kimber
Brandenburg Hatchery, Dunedin, Florida	DeKalb
Clary's Hatchery, Inc., Lubbock, Texas	Honegger
Coombs Poultry Farm, Inc., Sedgwick, Kansas	Hy-Line
D & C Hatchery, Hamilton, Texas	Ideal
Del Rio Farm, Mesa, Arizona	Hansen (Wash.)
DeWitt's Texas Hatchery, Nacogdoches, Texas	Babcock
DeWitt's Turkey Hatchery, Inc., Waxahachie, Texas	Babcock
Dirkse Leghorn Farm, Zeeland, Michigan	Ideal, Warren
Farvue Poultry Farm, South Salem, New York	Hy-Line
Feather Hill Farm, Dade City, Florida	Babcock
Flinn's Hatchery, San Antonio, Texas	Honegger
Florin Farms, Inc., Mt. Joy, Pennsylvania	H & N



LIST OF ENTRANTS OTHER THAN BREEDER OF STOCK - Continued

<u>Name and Address</u>	<u>Stock Entered</u>
Florida Hen Ranch, Ft. Lauderdale, Florida	Honegger
Florida State Hatcheries, Gainesville, Florida	Kimber
Frizzell Poultry Farm & Hatchery, Tampa, Florida	H & N
Golden Oak Hatchery, DeLeon, Texas	Ideal
Greider Leghorn Farms, Inc., Mt. Joy, Pennsylvania	Shaver
Grigsby's Hatchery, Georgetown, Texas	DeKalb
Hodges Poultry Farm & Hatchery, Callahan, Florida	Babcock
Hubbard Farms, Inc., Lancaster, Pennsylvania	Kimber
Hudson Hatchery, Jonesboro, Tennessee	Babcock
Hy-Lay Hatcheries, Inc., Bryan, Texas	Hy-Line
Intercontinental Hatchery, Miami Springs 66, Florida	Ideal
Joe's Poultry Farm, Arcadia, Florida	Babcock
Kazmeier Hatchery, Bryan, Texas	Hy-Line
Longnecker's Hatchery, Elizabethtown, Pennsylvania	Kimber
Maple Leaf Hatchery, Orange City, Florida	Rapp
Miami International Hatchery, Inc., Miami, Florida	Kimber
Nichols Poultry Farm, Jefferson City, Tennessee	Kimber
Oak Crest Hatchery, DeFuniak Springs, Florida	H & N
Oak Crest Hatcheries, Inc., Jacksonville, Florida	H & N
Orange Blossom Hatchery, Jacksonville, Florida	Dryden
Pierce, A. D. Hatchery, Inc., Brooklyn, Connecticut	Ames
Pierson-Craddock Hatchery, Hamilton, Texas	DeKalb
Pine Acres Poultry Farm, Lake City, Florida	H & N
Pine Air Poultry Acres, Jacksonville, Florida	Honegger
Riverside Hatchery, Box 1391, Knoxville, Tennessee	Ball
Rothway Hatcheries, Phoenix, Arizona	Hy-Line
Smith's Hatchery, Henry, Hilliard, Florida	DeKalb
Stetzel's Hatchery, Paris, Arkansas	Cashman
Sun Valley Hatchery, Phoenix, Arizona	H & N
Swift & Co., Blair, Wisconsin	Shaver
Tri-State Hatchery, Inc., Graceville, Florida	Demler
Vance Hatchery, Shallowater, Texas	H & N
Voscinar Poultry Farm, Brooksville, Florida	Ghostley
Wallace Hatchery, Inc., St. Petersburg, Florida	Hy-Line
Wallace Hy-Cross Hatcheries, Doylestown, Pennsylvania	Hy-Line
Weaver's Hatchery, Lititz, Pennsylvania	Cashman
Western Hatcheries, Dallas, Texas	Kimber
Western Hatcheries, Henderson, Texas	Kimber
Wheelock, Walter E., Chambersburg, Pennsylvania	Ghostley
Williams Poultry Farm & Hatchery, Denison, Texas	H & N
Wilson Poultry Farm & Hatchery, Clyde, Texas	Hy-Line
Yeiser Chix Inc., Winchester, Kentucky	Demler
Zollicker Hatchery, Harrisonville, Missouri	Hy-Line

## SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS

Trait Measured	Alberta		Arizona		Arkansas		British Columbia	
Net Income Over Feed and Chick Costs Per Pullet Housed - Ave.	\$1.861		\$2.468		\$2.206		\$1.695	
Range - Quarter 1	\$2.410	2.135	\$3.140	2.804	\$2.720	2.463	\$2.590	2.142
" " 2	2.134	1.861	2.803	2.468	2.462	2.206	2.141	1.695
" " 3	1.860	1.430	2.467	1.964	2.205	1.868	1.694	1.372
" " 4	1.429	1.000	1.963	1.460	1.867	1.530	1.371	1.050
Eggs Per Pullet Housed - Ave.	225.97		228.00		205.66		178.68	
Range - Quarter 1	248.90	237.43	253.00	240.50	230.50	218.08	226.40	202.54
" " 2	237.42	225.97	240.49	228.00	218.07	205.66	202.53	178.68
" " 3	225.96	213.23	227.99	213.50	205.65	195.83	178.67	166.49
" " 4	213.22	200.50	213.49	199.00	195.82	186.00	166.48	154.30
Days to 50% Production - Ave.	166.5		170.8		185.8		185.3	
Range - Quarter 1	157.0	161.8	166.0	168.4	177.0	181.4	175.0	180.2
" " 2	161.9	166.5	168.5	170.8	181.5	185.8	180.3	185.3
" " 3	166.6	171.3	170.9	173.9	185.9	194.9	185.4	194.7
" " 4	171.4	176.0	174.0	177.0	195.0	204.0	194.8	204.0
% Mortality Growing Period - Ave.	1.86		3.36		7.93		3.97	
Range - Quarter 1	0.00	0.93	0.00	1.68	3.20	5.57	1.30	2.64
" " 2	0.94	1.86	1.69	3.36	5.58	7.93	2.65	3.97
" " 3	1.87	4.38	3.37	5.78	7.94	10.52	3.98	5.34
" " 4	4.39	6.90	5.79	8.20	10.53	13.10	5.35	6.70
% Mortality Laying House - Ave.	5.45		11.50		10.18		19.52	
Range - Quarter 1	3.00	4.23	4.00	7.75	4.60	7.39	5.60	12.56
" " 2	4.24	5.45	7.76	11.50	7.40	10.18	12.57	19.52
" " 3	5.46	6.73	11.51	15.75	10.19	15.34	19.53	24.76
" " 4	6.74	8.00	15.76	20.00	15.35	20.50	24.77	30.00
Egg Size - Average	25.00		24.60		25.43		24.13	
Range - Quarter 1	25.60	25.30	24.90	24.75	26.20	25.81	24.90	24.51
" " 2	25.29	25.00	24.74	24.60	25.80	25.43	24.50	24.13
" " 3	24.99	24.65	24.59	24.25	25.42	24.86	24.12	23.71
" " 4	24.64	24.30	24.24	23.90	24.85	24.30	23.70	23.30
% Large & Extra Large Eggs - Ave.	60.62		66.36		70.72		68.15	
Range - Quarter 1	69.00	64.81	70.50	68.43	82.50	76.61	76.00	72.07
" " 2	64.80	60.62	68.42	66.36	76.60	70.72	72.06	68.15
" " 3	60.61	52.26	66.35	59.78	70.71	60.61	68.14	59.72
" " 4	52.25	43.90	59.77	53.20	60.60	50.50	59.71	51.30
Pounds Feed Per Dozen 24 Oz. Eggs - Average	4.836		4.423		4.656		4.585	
Range - Quarter 1	4.430	4.633	4.020	4.222	4.280	4.468	4.230	4.408
" " 2	4.634	4.836	4.223	4.423	4.469	4.656	4.409	4.585
" " 3	4.837	5.383	4.424	4.742	4.657	4.888	4.586	4.883
" " 4	5.384	5.930	4.743	5.060	4.889	5.120	4.884	5.180
Albumen - Haugh Units - Ave.	74.64		80.63		71.96		72.60	
Range - Quarter 1	78.20	76.42	83.00	81.81	77.20	74.58	75.60	74.10
" " 2	76.41	74.67	81.80	80.63	74.57	71.96	74.09	72.60
" " 3	74.63	72.97	80.62	77.81	71.95	69.23	72.59	69.10
" " 4	72.96	71.30	77.80	75.00	69.22	66.50	69.09	65.60
Blood Spots - All Sizes - Ave.	4.40		0.51		2.41		3.70	
Range - Quarter 1	1.80	3.10	0.00	0.26	1.00	1.71	0.50	2.10
" " 2	3.11	4.40	0.27	0.51	1.72	2.41	2.11	3.70
" " 3	4.41	7.80	0.52	0.96	2.42	3.56	3.71	7.15
" " 4	7.81	11.20	0.97	1.40	3.57	4.70	7.16	10.60

## SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

California Floor	California Cage	Central Canada	Florida	Iowa	Kansas
\$3.620	.....	\$1.391	\$2.679	.....	.....
\$4.290 3.955	.....	\$2.230 1.811	\$3.100 2.889	.....	.....
3.954 3.620	.....	1.810 1.391	2.888 2.679	.....	.....
3.619 3.050	.....	1.390 0.506	2.678 2.434	.....	.....
3.049 2.480	.....	505 -0.320	2.433 2.190	.....	.....
278.79	247.87	184.06	237.58	184.31	199.69
306.40 292.59	285.20 266.53	232.50 208.28	251.00 244.29	202.60 193.45	218.30 208.99
292.58 278.79	266.52 247.87	208.27 184.06	244.28 237.58	193.44 184.31	208.98 199.69
278.78 263.59	247.86 225.53	184.05 144.78	237.57 230.07	184.30 175.65	199.68 191.29
263.58 248.40	225.52 203.20	144.77 105.50	230.06 222.60	175.64 167.00	191.28 182.90
167.8	180.4	185.5	164.3	182.4	173.5
160.0 163.9	169.0 174.7	173.0 179.3	161.0 162.7	175.0 178.7	163.0 168.3
164.0 167.8	174.8 180.4	179.4 185.5	162.8 164.3	178.8 182.4	168.4 173.5
167.9 174.4	180.5 188.7	185.6 196.3	164.4 168.2	182.5 187.2	173.6 176.8
174.5 181.0	188.8 197.0	196.4 207.0	168.3 172.0	187.3 192.0	176.9 180.0
1.24	.....	3.62	3.35	11.31	6.88
0.00 0.62	.....	0.00 1.81	0.00 1.68	6.70 9.01	2.40 4.64
0.63 1.24	.....	1.82 3.62	1.69 3.35	9.02 11.31	4.65 6.88
1.25 3.77	.....	3.63 10.01	3.36 6.68	11.32 13.21	6.89 9.84
3.78 6.30	.....	10.02 16.40	6.69 10.00	13.22 15.00	9.85 12.80
7.14	8.60	27.72	6.96	12.44	15.43
2.50 4.82	0.00 4.30	11.20 19.46	3.00 4.98	6.70 9.57	7.70 11.57
4.83 7.14	4.31 8.60	19.47 27.72	4.99 6.96	9.58 12.44	11.58 15.43
7.15 11.07	8.61 16.85	27.73 49.11	6.97 10.98	12.45 15.82	15.44 18.77
11.08 15.00	16.86 25.10	49.12 70.50	10.99 15.00	15.83 19.20	18.78 21.10
24.78	25.25	24.79	24.37	24.91	25.36
25.60 25.19	26.70 25.97	25.80 25.30	25.30 24.83	25.40 25.15	26.10 25.73
25.18 24.78	25.96 25.25	25.29 24.79	24.82 24.37	25.14 24.91	25.72 25.36
24.77 24.29	25.24 24.72	24.78 24.15	24.36 24.08	24.90 24.45	25.35 25.00
24.28 23.80	24.71 24.20	24.14 23.50	24.07 23.80	24.44 24.00	24.99 24.80
76.94	84.58	58.32	70.36	65.85	70.63
88.50 82.72	90.70 87.64	69.80 64.06	78.50 74.43	73.00 69.42	77.50 74.06
82.71 76.94	87.63 84.58	64.05 58.32	74.42 70.36	69.41 65.88	74.05 70.63
76.93 70.37	84.57 79.19	58.31 50.41	70.35 66.78	65.84 58.12	70.62 65.31
70.36 63.80	79.18 73.80	50.40 42.50	66.77 63.20	58.11 50.40	65.30 60.00
4.134	.....	4.529	4.033	.....	4.681
3.700 3.917	.....	3.850 4.189	3.700 3.867	.....	4.460 4.571
3.918 4.134	.....	4.190 4.529	3.868 4.033	.....	4.572 4.681
4.135 4.517	.....	4.530 5.339	4.034 4.217	.....	4.682 4.871
4.518 4.900	.....	5.340 6.150	4.218 4.400	.....	4.872 5.060
73.90	73.67	71.05	79.63	82.59	80.35
79.90 76.90	80.80 77.23	74.90 72.98	83.50 81.56	86.40 84.49	82.50 81.42
76.89 73.90	77.22 73.67	72.97 71.05	81.55 79.63	84.48 82.59	81.41 80.35
73.89 70.85	73.66 69.73	71.04 68.48	79.62 77.31	82.58 80.54	80.34 78.67
70.84 67.80	69.72 65.80	68.47 65.90	77.30 75.00	80.53 78.50	78.66 77.00
4.94	6.67	4.10	2.79	.....	7.30
2.10 3.52	1.50 4.09	1.30 2.70	0.80 1.80	.....	5.50 6.40
3.53 4.94	4.10 6.67	7.71 4.10	1.81 2.79	.....	6.41 7.30
4.95 6.87	6.68 11.04	4.11 5.85	2.80 3.60	.....	7.31 8.50
6.88 8.80	11.05 15.40	5.86 7.60	3.61 4.40	.....	8.51 9.60

## SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (continued)

Trait Measured	Minnesota		Missouri		New Brunswick		New Hampshire	
Net Income Over Feed and Chick Costs Per Pullet Housed - Ave.	\$2.242		\$2.270		\$1.988		\$2.266	
Range - Quarter 1	\$2.740	2.491	\$2.790	2.530	\$2.630	2.309	\$2.900	2.583
" " 2	2.490	2.242	2.529	2.270	2.308	1.988	2.582	2.266
" " 3	2.241	2.031	2.269	1.955	1.987	1.624	2.265	2.098
" " 4	2.030	1.820	1.954	1.640	1.623	1.260	2.097	1.930
Eggs Per Pullet Housed - Ave.	230.45		233.60		211.89		217.59	
Range - Quarter 1	242.90	236.67	256.40	245.00	252.80	232.34	238.40	227.99
" " 2	236.66	230.45	244.99	233.60	232.33	211.89	227.98	217.59
" " 3	230.44	223.12	233.59	215.00	211.88	190.24	217.58	211.34
" " 4	223.11	215.80	214.99	196.40	190.23	168.60	211.33	205.10
Days to 50% Production - Ave.	170.1		182.0		171.1		186.8	
Range - Quarter 1	165.0	167.6	173.0	177.5	164.0	167.6	181.0	183.9
" " 2	167.7	170.1	177.6	182.0	167.7	171.1	184.0	186.8
" " 3	170.2	172.1	182.1	187.5	171.2	174.1	186.9	190.4
" " 4	172.2	174.0	187.6	193.0	174.2	177.0	190.5	194.0
% Mortality Growing Period - Ave.	7.63		1.47		2.42		4.11	
Range - Quarter 1	3.80	5.72	0.00	0.74	0.80	1.21	1.90	3.01
" " 2	5.73	7.63	0.75	1.47	1.22	2.42	3.02	4.11
" " 3	7.64	9.87	1.48	4.24	2.43	3.76	4.12	5.11
" " 4	9.88	12.10	4.25	7.00	3.77	5.10	5.12	6.10
% Mortality Laying House - Ave.	8.86		6.96		11.06		6.36	
Range - Quarter 1	4.40	6.63	0.00	3.48	0.90	5.98	2.70	4.53
" " 2	6.64	8.86	3.49	6.96	5.99	11.06	4.54	6.36
" " 3	8.87	11.78	6.97	15.48	11.07	17.58	6.37	10.58
" " 4	11.79	14.70	15.49	24.00	17.59	24.10	10.59	14.80
Egg Size - Average	25.03		24.94		24.82		25.78	
Range - Quarter 1	25.50	25.26	26.30	25.62	25.90	25.36	26.70	26.24
" " 2	25.25	25.03	25.61	24.94	25.35	24.82	26.23	25.78
" " 3	25.02	24.76	24.93	24.37	24.81	24.46	25.77	25.44
" " 4	24.75	24.50	24.36	23.80	24.45	24.10	25.43	25.10
% Large & Extra Large Eggs - Ave.	76.51		77.24		59.08		74.12	
Range - Quarter 1	82.20	79.35	89.00	83.12	70.20	64.64	86.60	80.36
" " 2	79.34	76.51	83.11	77.24	64.63	59.08	80.35	74.12
" " 3	76.50	72.85	77.23	68.62	59.07	54.19	74.11	68.06
" " 4	72.84	69.20	68.61	60.00	54.18	49.30	68.05	62.00
Pounds Feed Per Dozen 24 Oz. Eggs - Average	4.445		4.384		4.479		4.629	
Range - Quarter 1	4.170	4.308	4.040	4.212	3.940	4.210	4.170	4.400
" " 2	4.309	4.445	4.213	4.384	4.211	4.479	4.401	4.629
" " 3	4.446	4.553	4.385	4.612	4.480	4.770	4.630	4.810
" " 4	4.554	4.660	4.613	4.840	4.771	5.060	4.811	4.990
Albumen - Haugh Units - Ave.	82.34		83.42		71.66		69.42	
Range - Quarter 1	87.20	84.77	87.90	85.66	75.30	73.48	73.80	71.61
" " 2	84.76	82.34	85.65	83.42	73.47	71.66	71.60	69.42
" " 3	82.33	79.47	83.41	80.61	71.65	69.53	69.41	65.36
" " 4	79.46	76.60	80.60	77.80	69.52	67.40	65.35	61.30
Blood Spots - All Sizes - Ave.	1.44		6.41		12.38		5.48	
Range - Quarter 1	0.00	0.72	1.00	3.71	3.60	7.99	1.80	3.64
" " 2	0.73	1.44	3.72	6.41	8.00	12.38	3.65	5.48
" " 3	1.45	2.52	6.42	10.46	12.39	21.74	5.49	7.89
" " 4	2.53	3.60	10.47	14.50	21.75	31.10	7.90	10.30



## SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

New Jersey		Central New York		Western New York		North Carolina		Pennsylvania		Rhode Island	
\$2.630		\$2.803		\$2.577		\$1.878		\$2.030		\$3.417	
\$3.110	2.870	\$3.350	3.076	\$3.320	2.948	\$2.350	2.114	\$2.650	2.340	\$4.170	3.793
2.869	2.630	3.075	2.803	2.947	2.577	2.113	1.878	2.339	2.030	3.792	3.417
2.629	2.320	2.802	2.471	2.576	2.013	1.877	1.694	2.029	1.600	3.416	2.673
2.319	2.020	2.470	2.140	2.012	1.450	1.693	1.510	1.599	1.170	2.672	1.930
213.09		231.41		230.45		232.85		239.44		228.37	
237.30	225.19	261.40	246.40	255.30	242.87	259.30	246.07	266.90	253.17	256.00	242.18
225.18	213.09	246.39	231.41	242.86	230.45	246.06	232.85	253.16	239.44	242.17	228.37
213.08	195.74	231.40	221.85	230.44	210.92	232.84	219.62	239.43	216.87	228.36	202.48
195.73	178.40	221.84	212.30	210.91	191.40	219.61	206.40	216.86	194.30	202.47	176.60
184.2		173.7		178.5		168.9		163.2		182.5	
166.0	175.1	163.0	168.4	169.0	173.8	162.0	165.5	156.0	159.6	169.0	175.8
175.2	184.2	168.5	173.7	173.9	178.5	165.6	168.9	159.7	163.2	175.9	182.5
184.3	190.6	173.8	177.9	178.6	184.3	169.0	172.0	163.3	170.1	182.6	191.8
190.7	197.0	178.0	182.0	184.4	190.0	172.1	175.0	170.2	177.0	191.9	201.0
8.00		2.99		2.52		2.14		2.67		2.71	
0.00	4.00	0.00	1.50	0.00	1.26	0.00	1.07	0.00	1.34	0.00	1.36
4.01	8.00	1.51	2.99	1.27	2.52	1.08	2.14	1.35	2.67	1.37	2.71
8.01	14.90	3.00	4.95	2.53	4.71	2.15	4.42	2.68	6.14	2.72	7.29
14.91	21.80	4.96	6.90	4.72	6.90	4.43	6.70	6.15	9.60	7.30	10.00
13.50		6.91		6.82		12.36		5.84		12.25	
6.00	9.75	2.00	4.46	0.00	3.41	3.00	7.68	0.00	2.92	0.00	6.13
9.76	13.50	4.47	6.91	3.42	6.82	7.69	12.36	2.93	5.84	6.14	12.25
13.51	22.25	6.92	11.46	6.83	10.41	12.37	18.68	5.84	12.92	12.26	17.78
22.26	31.00	11.47	16.00	10.42	14.00	18.69	25.00	12.93	20.00	17.79	23.10
24.28		25.61		25.60		25.62		25.01		25.40	
25.00	24.64	26.50	26.05	27.70	26.65	27.30	26.46	27.90	26.45	26.60	26.00
24.63	24.28	26.04	25.61	26.64	25.60	26.45	25.62	26.44	25.01	25.99	25.40
24.27	23.94	25.60	25.20	25.59	24.90	25.61	25.06	25.00	24.50	25.39	24.90
23.93	23.60	25.19	24.80	24.89	24.20	25.05	24.50	24.49	24.00	24.89	24.40
67.49		71.35		66.28		78.80		56.30		88.87	
76.10	71.79	80.60	75.97	84.70	75.49	88.00	83.40	81.80	69.05	94.20	91.53
71.78	67.49	75.96	71.35	75.48	66.28	83.39	78.80	69.04	56.03	91.52	88.87
67.48	61.74	71.34	65.62	66.27	54.34	78.79	74.05	56.29	47.90	88.86	85.68
61.73	56.00	65.61	59.90	54.33	42.40	74.04	69.30	47.89	39.50	85.67	82.50
4.256		4.230		4.588		4.295		4.359		4.805	
3.890	4.073	3.910	4.070	4.190	4.389	3.970	4.133	3.990	4.175	4.370	4.588
4.074	4.256	4.071	4.230	4.390	4.588	4.134	4.295	4.176	4.359	4.589	4.805
4.257	4.458	4.231	4.450	4.589	4.859	4.296	4.503	4.360	4.730	4.806	5.393
4.459	4.660	4.451	4.670	4.860	5.130	4.504	4.710	4.731	5.100	5.394	5.980
83.19		77.77		76.65		78.43		78.24		71.83	
86.40	84.79	81.70	79.73	81.20	78.92	82.20	80.31	82.60	80.42	77.50	74.66
84.78	83.19	79.72	77.77	78.91	76.65	80.30	78.43	80.41	78.24	74.65	71.83
83.18	81.79	77.76	75.63	76.64	73.57	78.42	76.11	78.23	75.42	71.82	69.66
81.78	80.40	75.62	73.50	73.56	70.50	76.10	73.80	75.41	72.60	69.65	67.50
3.75		5.52		5.26		5.96		3.42		3.94	
0.07	2.23	2.40	3.96	2.70	3.98	2.30	4.13	0.70	2.06	1.80	2.87
2.24	3.75	3.97	5.52	3.99	5.26	4.14	5.96	2.07	3.42	2.88	3.94
3.76	5.78	5.53	8.71	5.27	6.98	5.97	7.83	3.43	6.36	3.95	4.97
5.79	7.80	8.72	11.90	6.99	8.70	7.84	9.70	6.37	9.30	4.98	6.00

## SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

Trait Measured	Tennessee		Texas		Wisconsin	
New Income Over Feed and Chick						
Costs Per Pullet Housed - Ave.	\$1.428		\$1.852		\$2.396	
Range - Quarter 1	\$2.020	1.724	\$2.350	2.011	\$3.240	2.818
" " 2	1.723	1.428	2.010	1.852	2.817	2.396
" " 3	1.427	1.084	1.851	1.601	2.395	1.913
" " 4	1.083	0.740	1.600	1.350	1.912	1.430
Eggs Per Pullet Housed - Ave.	188.68		205.38		234.48	
Range - Quarter 1	212.40	200.54	232.10	218.74	266.30	250.39
" " 2	200.53	188.68	218.73	205.38	250.38	234.48
" " 3	188.67	175.54	205.37	186.84	234.47	219.69
" " 4	175.53	162.40	186.83	168.30	219.68	204.90
Days to 50% Production - Ave.	170.3		170.9		171.3	
Range - Quarter 1	162.0	166.2	164.0	167.5	162.0	166.7
" " 2	166.3	170.3	167.6	170.9	166.8	171.3
" " 3	170.4	175.2	171.0	175.0	171.4	175.2
" " 4	175.3	180.0	175.1	179.0	175.3	179.0
% Mortality Growing Period - Ave.	1.81		4.72		2.72	
Range - Quarter 1	0.00	0.91	0.00	2.36	0.00	1.36
" " 2	0.92	1.81	2.37	4.72	1.37	2.72
" " 3	1.82	4.66	4.73	9.56	2.73	4.66
" " 4	4.67	7.50	9.57	14.40	4.67	6.60
% Mortality Laying House - Ave.	13.54		12.72		13.28	
Range - Quarter 1	2.20	7.87	2.10	7.41	2.00	7.64
" " 2	7.88	13.54	7.42	12.72	7.65	13.28
" " 3	13.55	23.97	12.73	19.91	13.29	21.64
" " 4	23.98	34.40	19.92	27.10	21.65	30.00
Egg Size - Average	25.26		25.19		24.70	
Range - Quarter 1	26.20	25.73	26.30	25.74	25.60	25.15
" " 2	25.72	25.26	25.73	25.19	25.14	24.70
" " 3	25.25	24.83	25.18	24.49	24.69	24.15
" " 4	24.82	24.40	24.48	23.80	24.14	23.60
% Large & Extra Large Eggs - Ave.	83.89		70.37		75.17	
Range - Quarter 1	90.20	87.04	77.60	73.98	81.90	78.53
" " 2	87.03	83.89	73.97	70.37	78.52	75.17
" " 3	83.88	79.74	70.36	63.78	75.16	68.78
" " 4	79.73	75.60	63.77	57.20	68.77	62.40
Pounds Feed Per Dozen 24 Oz.						
Eggs - Average	5.268		4.180		4.184	
Range - Quarter 1	4.660	4.964	3.700	3.940	3.790	3.987
" " 2	4.965	5.268	3.941	4.180	3.988	4.184
" " 3	5.269	5.624	4.181	4.390	4.185	4.392
" " 4	5.625	5.980	4.391	4.600	4.393	4.600
Albumen - Haugh Units - Ave.	74.81		82.08		84.79	
Range - Quarter 1	78.10	76.45	85.00	83.54	90.30	87.54
" " 2	76.44	74.81	83.53	82.08	87.53	84.79
" " 3	74.80	72.75	82.07	80.34	84.78	80.84
" " 4	72.74	70.70	80.33	78.60	80.83	76.90
Blood Spots - All Sizes - Ave.	6.66		3.45		4.70	
Range - Quarter 1	2.20	4.43	0.70	2.08	1.90	3.30
" " 2	4.44	6.66	2.09	3.45	3.31	4.70
" " 3	6.67	9.53	3.46	5.93	4.71	7.45
" " 4	9.54	12.40	5.94	8.40	7.46	10.20

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME AND FEED COST (\$)	EGG PRO- (No.)	AGE AT 90% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (g)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Allstate Hatchery, Willmar, Minnesota													
Allstate, Minn.	Minn.	WL SX	LX 330	4	3	3	3	1	4	4	4	3	1
Allstate, Minn.	WNY	WL SX	LX 330	4	3	2	3	3	4	4	4	1	3
Allstate, Minn.	Tenn.	WL SX	LX 330	3	2	3	3	3	4	4	3	1	2
Allstate, Minn.	Wisc.	WL SX	LX 330	3	2	2	2	2	4	3	3	3	1
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa	Cal. C	INX	424		3	4		1	2	2		2	1
Ames, Iowa	Cal. F	INX	424	3	4	4	1	2	1	1	3	1	1
Ames, Iowa	Kans.	INX	424		3	4	2	4	3	3	1	1	1
Ames, Iowa (Nevada, Mo.)	Mo.	INX	424	3	3	3	1	3	3	3	2	3	3
Ames, Iowa (M & M, N.J.)	N. J.	INX	424	3	3	2	1	3	3	3	3	3	1
Ames, Iowa (Newton, Del.)	CNY	INX	424	1	1	2	2	1	3	3	2	2	1
Ames, Iowa	Penna.	INX	424	2	1	3	3	1	4	3	2	3	3
Ames, Iowa	Tenn.	INX	424	4	4	4	3	4	2	3	4	2	2
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa	B. C.	INX	434 R	3	3	2	3	4	4	4	2	3	2
Ames, Iowa (Childers, Cal.)	Cal. C	INX	434 R		1	2		2	3	3		3	2
Ames, Iowa (Childers, Cal.)	Cal. F	INX	434 R	3	4	3	3	4	3	3	3	2	2
Ames, Iowa	Iowa	INX	434 R		3	4	3	2	2	2		1	
Ames, Iowa (Lamberton, Minn.)	Minn.	INX	434 R	4	4	4	2	4	3	3	4	3	2
Ames, Iowa	Tex.	INX	434 R	4	3	3	2	3	4	4	3	4	2
Ames, Iowa (Placke-W. Salem, Wisc.)	Wisc.	INX	434 R	4	4	2	2	4	4	4	4	4	1
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa (Cook, N.S.)	N. B.	INX	505	2	2	1	1	2	3	3	3	2	4
Ames, Iowa	N. H.	INX	505	4	4	1	4	1	3	3	4	1	2
Ames, Iowa (Mid Valley, Va.)	N. C.	INX	505	4	4	1	1	3	3	2	4	3	1
Pierce, Conn.	R. I.	INX	505	1	3	4	2	1	2	1	2	3	4
Andrews, J. J., R. R. #3, Chilliwick, B. C.													
Andrews, B. C.	B. C.	CGxWL BX	Polka Dot	3	4	4	2	3	4	2	2	1	2
Andrews, B. C.	C. C.	CGxWL BX	Polka Dot	1	2	1	1	1	3	3	1	2	1
Anthony, Geo. M. & Sons, Strausstown, Penna.													
Anthony, Penna.	Mo.	WL SX	Anthony	3	3	2	1	2	2	2	4	2	2
Anthony, Penna.	N. J.	WL SX	Anthony	4	3	2	3	3	4	2	4	3	4
Anthony, Penna.	CNY	WL SX	Anthony	3	3	3	2	3	2	3	3	1	3
Anthony, Penna.	Penna.	WL SX	Anthony	2	2	2	2	3	3	3	3	2	3
Anthony, Penna.	Penna.	WL SX	Anthony	4	3	3	3	3	2	3	3	2	3
Anthony, Penna.	R. I.	WL SX	Anthony	3	3	2	3	3	3	3	3	2	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING		STRAIN OR TRADE NAME	INCOME OVER FEED AND CHICK COST	EGG PRO- DUCTION (hen housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY	LAYING MORTALITY	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Appleby Poultry Farm, Mission City, B. C.															
Appleby, B. C.		B. C.	WL	SX	Life Line	4	4	4	3	4	3	2	3	3	2
Appleby, B. C.		C. C.	WL	SX	Life Line	3	3	3	2	3	2	1	3	2	1
Arbor Acres Farm, Inc., Glastonbury, Conn.															
Arbor Acres, Conn.		Ark.	WL	SX	Queen	3	3	3	4	4	1	1	3	2	2
Arbor Acres, Conn. (A. A., Cal.)		Cal. C	WL	SX	Queen	3	3	3	3	3	2	2	2	1	3
Arbor Acres, Conn. (A. A., Cal.)		Cal. F	WL	SX	Queen	3	3	4	1	4	1	1	2	1	2
Arbor Acres, Conn.		Iowa	WL	SX	Queen	3	3	2	2	4	2	2	2	2	
Arbor Acres, Conn. (A. A., Ark.)		Mo.	WL	SX	Queen	1	2	2	4	3	3	3	1	1	1
Arbor Acres, Conn.		N. H.	WL	SX	Queen	3	2	2	4	4	4	3	1	1	2
Arbor Acres, Conn. (Kerr, N.J.)		N. J.	WL	SX	Queen	4	4	4	4	4	2	2	3	2	3
Arbor Acres, Conn. (Jaffee, N.Y.)		CNY	WL	SX	Queen	2	2	3	4	3	2	2	2	1	2
Arbor Acres, Conn. (Hawley, N.Y.)		WNY	WL	SX	Queen	2	2	3	2	4	2	2	1	1	3
Arbor Acres, Conn. (A. A., N.C.)		N. C.	WL	SX	Queen	4	2	3	2	3	2	2	3	2	4
Arbor Acres, Conn.		Penna.	WL	SX	Queen	3	3	2	3	4	3	2	3	2	2
Arbor Acres, Conn.		Tex.	WL	SX	Queen	1	3	3	2	3	1	1	2	1	1
Arbor Acres, Conn. (A. A., Ind.)		Wisc.	WL	SX	Queen	1	1	3	2	2	2	2	1	1	3
Arnold, C. T., Arborg, Manitoba															
Arnold, Manitoba		Alta.	BRx(RIRxLS)	Hybrid	255	4	4	1	3	4	1	2	4	3	4
Arnold, Manitoba		C. C.	BRx(RIRxLS)	Hybrid	255	4	4	3	4	4	3	4	4	2	4
Austin's Hatchery, Arkona, Ontario															
Austin, Ontario		C. C.	WL	SX	Austin	2	2	3	1	1	2	2	2	3	3
Avery, C. T. & Son, Colrain, Massachusetts															
Avery, Mass.		N. H.	RIR	PS	Flock Mating	3	2	4	3	3	4	4	4	4	4
Avery, Mass.		R. I.	RIR	PS	Flock Mating	3	3	3	4	4	4	4	3	4	4
Babcock Poultry Farm, Ithaca, New York															
Babcock, N. Y. (Hogsett, Cal.)		Cal. C.	WL	SX	Bessie	3	3	3	3	3	3	2	2	2	2
Babcock, N. Y. (Hogsett, Cal.)		Cal. F	WL	SX	Bessie	2	2	2	3	1	2	2	2	2	3
Babcock, N. Y. (Hogsett, Cal.)		Fla.	WL	SX	Bessie	3	3	1	2	3	2	2	3	2	3
Babcock, N. Y.		Iowa	WL	SX	Bessie	4	4	2	3	4	3	3	3	3	1
Babcock, N. Y.		Kans.	WL	SX	Bessie	4	4	3	3	3	2	2	3	3	1
Babcock, N. Y.		Mo.	WL	SX	Bessie	3	3	3	1	2	3	3	3	2	3
Babcock, N. Y. (Melini, N.J.)		N. J.	WL	SX	Bessie	3	3	3	2	3	2	3	2	3	2
Babcock, Penna.		Penna.	WL	SX	Bessie	3	3	2	2	1	2	3	3	3	3
Hudson, Tenn.		Tenn.	WL	SX	Bessie	3	3	2	3	3	3	2	3	1	3



QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADE NAME	INCOME OVER FEED AND CHICK COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Babcock Poultry Farm, Ithaca, New York													
Babcock, N. Y. (Hogsett, Cal.)	Cal. C	WL	Bonnie	1	3	2	2	2	3	2	2	3	2
Babcock, N. Y. (Hogsett, Cal.)	Cal. F	WL	Bonnie		1	2	1	1	3	2	2	3	2
Hodges, Fla.	Fla.	WL	Bonnie	1	1	1	2	3	2	2	2	3	3
Joe's, Fla.	Fla.	WL	Bonnie	2	1	1	2	2	3	3	2	4	4
Babcock, N. Y. (Mettlings, Minn.)	Minn.	WL	Bonnie	2	1	2	3	1	3	3	3	3	3
Babcock, N. Y.	Mo.	WL	Bonnie	2	1	2	1	3	4	3	2	3	1
Babcock, N. Y.	N. H.	WL	Bonnie	3	1	1	3	3	4	4	1	3	3
Babcock, N. Y.	N. J.	WL	Bonnie	2	1	1	1	1	3	3	2	4	1
Babcock, N. Y.	CNY	WL	Bonnie	1	1	1	4	3	3	3	2	2	1
Babcock, N. Y.	WNY	WL	Bonnie	2	2	1	3	3	3	3	2	4	4
Babcock, N. Y.	N. C.	WL	Bonnie	1	1	1	1	1	4	3	1	4	3
Babcock, Penna.	Penna.	WL	Bonnie	1	1	1	1	2	3	3	1	3	1
Babcock, N. Y.	R. I.	WL	Bonnie	1	1	1	1	1	4	4	1	4	3
Babcock, N. Y.	Tenn.	WL	Bonnie	1	1	2	2	2	3	2	1	4	3
DeWitt, Texas	Tex.	WL	Bonnie	2	2	3	2	1	3	2	3	4	1
DeWitt, Texas	Tex.	WL	Bonnie	2	2	3	1	3	3	3	3	3	2
Babcock, N. Y. (Peck, Wisc.)	Wisc.	WL	Bonnie	2	1	3	3	2	2	2	2	2	2
Balakshin, N. A., R. R. #3, Chilliwick, B. C.	B. C.	WL	Balakshin	2	2	2	2	1	3	3	2	2	3
Balakshin, B. C.	C. C.	WL	Balakshin	2	2	2	3	2	3	3	1	2	4
Ball Poultry Farm, Owego, New York	Tenn.	WL	Ball 551	2	3	2	2	3	2	1	2	4	2
Ball Poultry Farm, Owego, New York	WNY	WL	Ball 551 A	3	3	1	3	3	3	3	2	3	3
Ball, N. Y.	Penna.	WL	Ball 591	2	3	2	4	2	3	3	2	3	3
Ball Poultry Farm, Owego, New York	CNY	WL	Ball 592	3	3	3	3	3	2	2	2	3	4
Baumgartner Poultry Farms, Litchfield, Minn.	Mo.	WL	408	3	3	2	3	3	2	2	3	2	2
Baumgartner, Minn.	Mo.	WL	Beamsdale 66	2	2	4	3	1	3	2	2	1	4
Beamsdale Farm, Lawndale, North Carolina	N. C.	WL	Beamsdale 66	2	1	3	3	2	3	2	3	3	3
Beamsdale, N. C.	Mo.	INX	Booth Line 351	3	3	2	3	3	3	3	3	4	3
Beamsdale, N. C.													
Booth Farms & Hatchery, Clinton, Mo.													
Booth, Mo.													

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADE NAME	INCOME OVER FEED AND CHICK COST	EGG PRO- DUCTION (No.)	AGE AT LAYS (Days)	MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Brenders Leghorns, Ferndale, New York														
Brender, N.Y.		Ark.	WL SX	Money Maker #1	3	3	3	1	1	1	1	3	2	1
Brender, N.Y.		Mo.	WL SX	Money Maker #1	3	3	3	1	2	2	2	3	2	3
Brender, N.Y.		N. H.	WL SX	Money Maker #1	4	4	3	3	3	3	3	2	2	3
Brender, N.Y.		N. J.	WL SX	Money Maker #1	2	3	4	1	2	1	1	2	2	2
Brender, N.Y.		CNY	WL SX	Money Maker #1	2	3	3	3	2	2	1	3	4	3
Brender, N.Y.		WNY	WL SX	Money Maker #1	3	3	1	2	2	2	2	3	3	3
Brender, N.Y.		N. C.	WL SX	Money Maker #1	3	4	4	2	3	1	1	2	3	3
Brender, N.Y.		Penna.	WL SX	Money Maker #1	3	3	4	1	2	2	2	3	3	3
Brender, N.Y.		R. I.	WL SX	Money Maker #1	3	3	3	3	3	3	3	1	3	2
Brender, N.Y.		Tenn.	WL SX	Money Maker #1	3	3	3	4	2	2	2	3	3	3
Brender, N.Y.		Tex.	WL SX	Money Maker #1	3	3	4	2	3	2	1	4	3	2
Buchanan's Poultry Ranch, Haney, B. C.														
Buchanan, B. C.		B. C.	WLx(WLxBA)	Kanaka White	2	2	1	2	3	2	3	1	4	4
Buchanan, B. C.		C. C.	WLx(WLxBA)	Kanaka White	1	1	1	3	2	2	3	1	3	3
Buck Hill Hatchery, Pascoag, Rhode Island														
Buck Hill, R. I. (Buck Hill, R. I.)		R. I.	BX	Sex Link	3	3	1	2	2	1	2	3	4	4
Bundesen Bros., Petaluma, California														
Bundesen, Cal. (Bundesen, Cal.)		Cal. C	CGxWL BX	Graycie		2	3		2	2	3		3	2
Bundesen, Cal. (Bundesen, Cal.)		Cal. F	CGxWL BX	Graycie	3	2	2	3	2	3	3	3	4	2
Burpee, Arthur K., Woodstock, N. B.														
Burpee, N. B.		N. B.	RIRxLS BX	Burpee	4	4	3	4	4	3	3	4	3	3
Burpee, Arthur K., Woodstock, N. B.														
Burpee, N. B.		C. C.	WLx(RIRxLS)	No. 1	3	3	2	3	3	1	1	3	2	1
Burpee, N. B.		N. B.	WLx(RIRxLS)	No. 1	1	1	1	4	2	2	2	1	2	1
Bustin, F. E., Saint John, N. B.														
Bustin, N. B.		N. B.	RIRxLS BX	Bustins	4	4	3	2	4	2	2	4	1	3
Cameron Leghorn Research Farm, Beaver Springs, Penna.														
Cameron, Penna.		Penna.	WL SX	924	1	1	1	3	3	3	2	1	1	1
Carey Farms, Marion, Ohio														
Carey Farms, Marion, Ohio		Penna.	WL SX	Carey Nicks	4	4	3	1	2	2	2	3	1	1
Carey Farms, Marion, Ohio														
Carey, Ohio		Mo.	WL SX	3-C	4	4	3	3	4	2	2	4	1	3
Carey Farms, Marion, Ohio														
Carey, Ohio		WNY	WL SX	E. J.'s	4	4	4	4	4	2	2	4	2	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME AND FEED COST (\$)	EGG PRO- DUCTION (No.)	AGE AT Laying POSS. (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Cashman Leghorn Farm, Webster, Kentucky													
Stetzel, Ark.	Ark.	WL	Hi-Cash	2	2	1	3	3	3	3	1	3	3
Cashman, Ky.	Mo.	WL	Hi-Cash	2	1	2	3	2	3	3	2	3	3
Cashman, Ky. (Bowers, N.C.)	N. C.	WL	Hi-Cash	4	4	3	1	4	4	4	2	3	4
Weaver's, Pa.	Penna.	WL	Hi-Cash	3	2	2	3	1	4	4	2	3	1
Cashman, Ky.	Tenn.	WL	Hi-Cash	1	1	3	2	2	2	2	2	4	4
Cashman, Ky.	Tex.	WL	Hi-Cash	2	2	3	4	3	3	3	2	3	2
Cashman Leghorn Farm, Webster, Kentucky													
Cashman, Ky.	Mo.	WL	Astronauts	1	1	2	1	1	3	3	1	3	2
Childers Hatchery, Santa Ana, California													
Childers, Cal.	Cal. C	CGxWLBX	Childers		2	2		2	2	2		4	2
Childers, Cal.	Cal. F	CGxWLBX	Childers	2	2	2	3	3	2	3	2	3	3
Clark, H. R., Burt's Corner, New Brunswick													
Clark, N.B.	N. B.	RIRxCRBX	Clark's 41	4	4	4	3	2	2	2	4	3	3
Clark, N.B.	C. C.	RIRxWLBX	Clark's 45	2	2	3	1	3	3	3	2	4	2
Clark, N.B.	N. B.	RIRxWLBX	Clark's 45	3	3	3	3	3	4	4	2	4	2
Clark, H. R., Burt's Corner, New Brunswick													
Clark, N.B.	N. B.	WLx(RIRxCR)	Clark's 541	2	2	1	4	4	3	4	2	3	1
Clark's Poultry Farm, Brandon, Manitoba													
Clark, Manitoba	C. C.	RIRx(LSxRIR)	Paymaster 101	2	2	2	1	2	2	2	3	3	2
Colonial Poultry Farms, Pleasant Hill, Missouri													
Colonial, Mo.	Mo.	WL	PS	2	3	2	1	2	2	3	2	2	2
Colonial Poultry Farms, Pleasant Hill, Missouri													
Colonial, Mo.	Cal. C	WL	IN		3	2		4	3	3		2	4
Colonial, Mo.	Cal. F	WL	IN	3	4	1	3	4	3	3	3	2	4
Colonial, Mo.	Mo.	WL	IN	2	2	2	4	3	2	2	2	3	2
Colonial, Mo. (Kreher, N.Y.)	CNY	WL	IN	2	2	2	4	4	3	3	2	2	2
Colonial, Mo. (Colonial, Ala.)	N. C.	WL	IN	4	4	2	3	3	2	2	2	2	4
Colonial, Mo.	Pa.	WL	IN	3	3	2	3	3	2	2	3	3	3
Colonial, Mo.	Tenn.	WL	IN	3	4	3	3	3	3	3	3	2	1
Colonial, Mo.	Tex.	WL	IN	4	3	2	4	4	3	3	3	2	3
Colonial Poultry Farms, Pleasant Hill, Missouri													
Colonial, Mo.	Ark.	WL	IN	3	2	1	4	3	2	2	2	2	3
Colonial, Mo. (Colonial, Minn.)	Minn.	WL	IN	4	4	1	4	4	2	3	4	2	3
Co-op Hatcheries, Edmonton, Alberta													
Co-op, Alta.	Alta.	NHxWLBX	Cross	4	4	1	1	2	3	3	4	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEE COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Cornell University, Ithaca, New York													
Univ. of Ark., Ark.	Ark.	WL	PS	Random Bred	4	2	1	3	4	4	4	3	3
Cornell Univ., N.Y.	Cal. C	WL	PS	Random Bred	4	4		2	4	4		3	3
Cornell Univ., N.Y.	Cal. F	WL	PS	Random Bred	3	3	4	2	4	4	3	3	3
Cornell Univ., N.Y.	Fla.	WL	PS	Random Bred	4	4	1	3	3	3	4	3	4
Purdue Univ., Ind.	Iowa	WL	PS	Random Bred	3	3	2	2	4	4		2	
Purdue Univ., Ind.	Kans.	WL	PS	Random Bred	4	4	4	4	4	4	4	3	4
Cornell Univ., N.Y.	Mo.	WL	PS	Random Bred	3	2	3	2	4	4	2	3	3
Cornell Univ., N.Y.	CNY	WL	PS	Random Bred	4	2	1	2	4	4	4	3	3
Cornell Univ., N.Y.	WNY	WL	PS	Random Bred	2	1	2	3	4	3	1	3	2
Cornell Univ., N.Y.	N. C.	WL	PS	Random Bred	4	3	4	3	4	4	3	3	4
Cornell Univ., N.Y.	Pa.	WL	PS	Random Bred	3	3	2	1	4	4	3	3	3
Cornell Univ., N.Y.	Tenn.	WL	PS	Random Bred	1	1	3	1	4	4	2	3	4
Cornell Univ., N.Y.	Tex.	WL	PS	Random Bred	4	3	1	3	4	4	4	3	4
Couvoir Co-Operatif, St. Augustin, Quebec													
Couvoir, Quebec	Alta.	WL	SX	Corvette	2	4	1	2	1	1	2	1	1
Couvoir, Quebec	B. C.	WL	SX	Corvette	3	4	4	4	1	1	3	1	2
Couvoir, Quebec	C. C.	WL	SX	Corvette	3	3	2	1	2	1	2	2	3
Couvoir, Quebec	N. B.	WL	SX	Corvette	2	2	3	2	2	2	1	1	1
Couvoir Co-Operatif, Ste. Martine, Quebec													
Couvoir, Quebec	C. C.	WL	SX	La Chateauguay	2	3	3	2	1	1	2	1	2
Dawson, P.E.I.													
DeKalb Agricultural Assoc., Sycamore, Ill.	C. C.	WLx(WLxBR)	Series 1000	2	2	2	2	3	3	3	2	3	3
Pierson, Texas (DeKalb, Ill.)	Tex.	INX	DeKalb 101	2	2	1	1	1	2	2	2	3	2
DeKalb, Ill. (Rice Lake, Wisc.)	Wisc.	INX	DeKalb 101	3	3	2	3	3	2	2	3	2	2
DeKalb Agricultural Assoc., Sycamore, Ill.													
DeKalb, Ill. (Holloway, Cal.)	Cal. C	INX	DeKalb 131	1	1	1		1	4	4		3	3
DeKalb, Ill. (Holloway, Cal.)	Cal. F	INX	DeKalb 131	1	1	1	3	1	4	3	1	3	2
DeKalb, Ill. (Willant's, Ont.)	C. C.	INX	DeKalb 131	1	1	1	1	1	3	4	1	2	2
Smith, Fla.	Fla.	INX	DeKalb 131	1	1	1	2	1	3	3	1	2	1
DeKalb, Ill.	Iowa	INX	DeKalb 131	2	2	1	3	2	3	3		3	
DeKalb, Ill.	Kans.	INX	DeKalb 131	1	1	1	1	2	3	2	1	2	3
DeKalb, Ill. (Olson, Mo.)	Mo.	INX	DeKalb 131	3	3	2	1	2	3	3	3	3	1
DeKalb, Ill. (Schubkegel, N.J.)	N. J.	INX	DeKalb 131	2	2	1	1	2	3	3	1	4	1
DeKalb, Ill.	Penna.	INX	DeKalb 131	2	1	1	3	2	4	4	1	2	1
Grigsby, Tex. (DeKalb, Ill.)	Tex.	INX	DeKalb 131	1	1	2	1	1	4	4	1	2	2
DeKalb, Ill. (Hegerfeld, Wisc.)	Wisc.	INX	DeKalb 131	2	1	2	3	2	2	2	2	2	3



QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEEF AND CHICK COST (\$)	EGG PRO- DUCTION (No.) (item housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	SPOTS BLOOD (%)
DeKalb Agricultural Assoc., Sycamore, Ill.													
Brandenburg, Fla.	Fla.	INX	DeKalb 151	3	4	2	4	3	2	2	1	1	1
DeKalb, Ill. (Thompson, Minn.)	Minn.	INX	DeKalb 151	2	2	2	3	1	3	2	1	1	1
DeKalb, Ill.	Mo.	INX	DeKalb 151	2	3	2	3	3	2	2	1	1	1
DeKalb, Ill.	CNY	INX	DeKalb 151	1	2	2	1	1	3	3	1	1	1
DeKalb, Ill. (DeKalb, Ill.)	N. C.	INX	DeKalb 151	2	2	2	3	2	2	2	1	1	1
DeKalb, Ill.	Tenn.	INX	DeKalb 151	2	2	1	2	2	2	2	2	2	2
DeKalb, Ill.	Tex.	INX	DeKalb 151	1	1	2	1	1	2	1	2	1	1
Del Rio Farm, Mesa, Arizona													
Del Rio, Ariz.	Ariz.	RIR	Del Rio	4	4	4	4	4	1	1	4	2	2
Demler Farms, Anaheim, California													
Demler, Cal. (Demler, Ceres, Cal.)	Cal. C	WL	Demler		3	2		3	3	3		2	2
Demler, Cal. (Demler, Ceres, Cal.)	Cal. F	WL	Demler	3	3	2	4	1	3	3	2	2	3
Yeiser, Ky.	Penna.	WL	Demler	3	3	1	3	3	3	3	3	3	3
Demler, Cal.	Tenn.	WL	Demler	4	4	1	2	3	2	2	4	4	2
Demler Farms, Anaheim, California													
Demler, Cal. (Demler, Ceres, Cal.)	Cal. C	Syn. x WL	Demler Kross		2	4		1	2	3		2	2
Demler, Cal. (Demler, Ceres, Cal.)	Cal. F	Syn. x WL	Demler Kross	3	3	2	1	2	3	3	3	4	3
Demler, Cal.	Mo.	Syn. x WL	Demler Kross	2	2	1	3	2	3	3	2	4	1
Demler, Cal.	Tex.	Syn. x WL	Demler Kross	3	3	1	2	3	3	3	4	3	2
Demler Farms, Anaheim, California													
Demler, Cal.	B. C.	INX	Demler IBX	2	2	2	1	1	3	3	1	3	3
Tri-States, Fla.	Fla.	INX	Demler IBX	4	4	1	4	4	3	3	4	3	2
Demler, Cal.	Iowa	INX	Demler IBX		3	2	4	2	2	2			
Demler, Cal. (Pearson, Wisc.)	Minn.	INX	Demler IBX	3	3	2	2	3	3	3	3	2	3
Demler, Cal.	WNY	INX	Demler IBX	2	2	1	2	2	2	2	1	3	3
Demler, Cal. (Anaheim, Cal.)	R. I.	INX	Demler IBX	2	2	1	3	2	2	2	1	3	1
Demler, Cal.	Wisc.	INX	Demler IBX	4	4	2	1	3	4	4	4	2	1
deZeeuw Leghorn Breeder, So. Edmonton, Alta.													
deZeeuw, Alta.	Alta.	WL	SX 601	2	2	2	1	1	4	3	2	2	3
deZeeuw Leghorn Breeder, So. Edmonton, Alta.													
deZeeuw, Alta.	Alta.	WL	SX 752	1	1	3	3	2	4	3	1	3	3
deZeeuw, Alta.	B. C.	WL	SX 752	3	4	2	4	4	3	3	3	4	3
deZeeuw, Alta.	C. C.	WL	SX 752	2	2	2	3	1	3	2	2	3	2
Dryden Farms, Inc., Modesto, California													
Orange Blossom, Fla.	Fla.	CGxWL BX	Gray X Leghorn	3	4	1	2	4	2	2	2	3	4
Dryden, Cal.	Mo.	CGxWL BX	Gray X Leghorn	1	1	1	1	1	2	2	1	4	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER EGG 24-OZ. (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Dryden Farms, Inc., Modesto, California													
Dryden, Cal.	Cal. C	WL SX	SX 60		4	4		3	2	1		3	3
Dryden, Cal.	Cal. F	WL SX	SX 60	3	3	4	1	2	1	1	3	2	3
Orange Blossom, Fla.	Fla.	WL SX	SX 60	1	2	4	3	3	2	1	2	3	3
Dryden, Cal.	Iowa	WL SX	SX 60		3	4	3	2	1	1		3	
Eby's Poultry Farm, Carrollton, Texas													
Eby, Texas	Mo.	WL SX	Grade #1	3	3	1	1	2	4	3	3	4	4
Eby, Texas	Tex.	WL SX	Grade #1	1	1	1	2	1	3	3	2	3	4
Erath Egg Farm, Stephenville, Texas													
Erath, Texas	Mo.	WL SX	Erath Str. X	2	2	3	1	2	2	1	2	2	1
Erath, Texas	Tenn.	WL SX	Erath Str. X	3	3	4	3	2	1	2	2	3	3
Erath, Texas	Tex.	WL SX	Erath Str. X	4	3	4	2	2	1	1	4	2	4
Evans, F. H., Abbotsford, B. C.													
Evans, B. C.	Alta.	WL SX	Echo Leghorns	2	2	4	4	1	2	2	1	2	3
Evans, B. C.	B. C.	WL SX	Echo Leghorns	3	3	3	3	3	2	1	3	2	3
Evans, B. C.	C. C.	WL SX	Echo Leghorns	2	2	3	2	3	2	2	2	2	3
Fisher Poultry Farm, Ayton, Ontario													
Fisher, Ontario	B. C.	WL SX	103	2	2	2	1	3	3	3	2	3	2
Fisher, Ontario	C. C.	WL SX	103	1	1	2	2	1	2	2	1	3	3
Fletcher Hatchery, Concord, North Carolina													
Fletcher, N. C.	N. C.	WL SX	FX 100	4	3	3	4	3	3	3	3	2	3
Forsgate Farms, Jamesburg, New Jersey													
Forsgate, N.J. (Eelman, N.J.)	N. J.	WL SX	FF 166	1	2	4	3	1	2	1	2	1	3
Forsgate Farms, Jamesburg, New Jersey													
Forsgate, N.J.	N. J.	WL SX	FF 160	2	2	2	3	2	2	2	2	1	1
Forsgate Farms, Jamesburg, New Jersey													
Forsgate, N.J.	CNY	WL PS	Forsgate	3	4	4	1	4	2	2	3	2	1
Forsgate, N.J.	Penna.	WL PS	Forsgate	3	3	3	2	3	2	2	3	2	2
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Cal. C	CGxWL BX	Garber		1	1		2	1	1		4	2
Garber, Cal.	Cal. F	CGxWL BX	Garber	2	2	1	3	1	1	2	1	2	2
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Cal. C	WL SX	G 200		3	2		1	3	2		2	2
Garber, Cal.	Cal. F	WL SX	G 200	1	1	2	3	1	3	3	2	1	1
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Penna.	WL SX	G 300	2	2	2	2	2	3	3	3	1	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (g)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Mo.	WL	SX	G 400	1	1	3	2	1	1	1	3	3
Garber, Cal.	Penna.	WL	SX	G 400	2	2	1	3	3	2	2	3	2
Garrison, Earl W., Bridgeton, New Jersey													
Garrison, N.J.	Penna.	RIRxWR BX	Golden Sex Link	4	4	4	3	4	1	1	4	1	4
Garrison, Earl W., Bridgeton, New Jersey													
Garrison, N.J.	N. J.	WL	SX	Garrison X 300	2	2	4	1	4	4	2	3	2
Gasson's Poultry Farm, Versailles, Ohio													
Gasson, Ohio	Mo.	WL	SX	G 33	2	2	3	1	3	3	2	2	2
Gasson, Ohio	Tenn.	WL	SX	G 33	2	2	2	2	3	3	2	2	2
Gasson, Ohio	Wisc.	WL	SX	G 33	1	1	3	1	3	3	2	2	3
Ghostley's Poultry Farm, Anoka, Minnesota													
Ghostley, Minn.	Ark.	WL	SX	Ghostley Pearl	3	3	2	4	1	3	4	1	2
Ghostley, Minn. (Santa Clara, Cal.)...	Cal. C	WL	SX	Ghostley Pearl	3	2	2	3	3	3	3	2	3
Ghostley, Minn. (Santa Clara, Cal.)...	Cal. F	WL	SX	Ghostley Pearl	2	3	3	1	3	2	3	1	3
Ghostley, Minn. (Barley, Ont.)...	C. C.	WL	SX	Ghostley Pearl	2	2	2	1	2	2	2	3	1
Voscinar, Fla.	Fla.	WL	SX	Ghostley Pearl	1	2	4	2	3	1	2	2	3
Ghostley, Minn.	Iowa	WL	SX	Ghostley Pearl	4	4	2	2	2	1	2	2	4
Ghostley, Minn.	Minn.	WL	SX	Ghostley Pearl	4	4	2	3	3	3	4	2	4
Ghostley, Minn.	Mo.	WL	SX	Ghostley Pearl	3	2	2	4	1	3	3	1	1
Ghostley, Minn. (Barney's, N.J.)...	N. J.	WL	SX	Ghostley Pearl	3	2	3	3	2	4	3	2	2
Ghostley, Minn. (Wheelock, Pa.)...	CNY	WL	SX	Ghostley Pearl	3	3	3	4	3	2	2	1	4
Ghostley, Minn. (Kelly, N. C.)...	N. C.	WL	SX	Ghostley Pearl	3	3	3	1	3	2	1	2	2
Wheelock, Penna.	Penna.	WL	SX	Ghostley Pearl	1	2	1	2	1	2	1	1	3
Ghostley, Minn.	R. I.	WL	SX	Ghostley Pearl	2	2	3	3	2	4	3	1	4
Ghostley, Minn.	Tenn.	WL	SX	Ghostley Pearl	4	4	2	3	3	2	3	4	1
Ghostley, Minn.	Tex.	WL	SX	Ghostley Pearl	4	4	2	4	4	3	4	1	2
Ghostley, Minn. (Rindfleisch, Wisc.)...	Wisc.	WL	SX	Ghostley Pearl	2	2	3	3	2	2	2	2	3
Goetz, Eugene, Jackson, New Jersey													
Goetz, N.J.	N. J.	WL	LS	Goetz	1	1	3	2	3	3	1	2	3
Good's Poultry Farm, Indiana, Pennsylvania													
Good, Penna.	Penna.	WL	SX	Goods	2	2	1	3	2	2	3	3	3
Goodine, Gerald, Lower Southampton, New Brunswick													
Goodine, N.B.	N. B.	(RIRxNH)xWL	Goodine	3	3	3	4	2	2	2	4	3	1
Great Plains Hatcheries, Effingham, Illinois													
Great Plains, Ill.	Mo.	RIR	PS	Egg Master	3	3	3	3	2	2	4	2	4
Great Plains Hatcheries, Effingham, Illinois													
Great Plains, Ill.	Mo.	BX	Golden Cross	2	3	3	1	2	1	1	4	2	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADE NAME	INCOME OVER FEED AND CHICK COST (\$)	EGG PRO- DUCTION (No.) (1100 housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN PER EGGS 24-02, (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Groupe Maska, St. Hyacinthe, Quebec	C. C.	WL	SX	Corvette 303	3	3	2	2	1	1	3	2	2
Groupe Maska, Que.	C. C.	WL	SX	Oka 39	2	2	1	2	3	3	2	2	2
Groupe Oka, Oka Two Mountains, Quebec													
Groupe Oka, Que.													
Hansen's Leghorn City, Puyallup, Washington													
Del Rio, Ariz.	Ariz.	WL	SX	Criss Cross H 25	4	4	3	3	4	4	4	3	1
Hansen, Wash.	B. C.	WL	SX	Criss Cross H 25	3	3	1	2	3	3	2	1	3
Hansen, Wash. (Ward, Cal.)	Cal. C	WL	SX	Criss Cross H 25	2	2	1	3	3	3	2	2	2
Hansen, Wash. (Ward, Cal.)	Cal. F	WL	SX	Criss Cross H 25	2	3	1	3	3	2	2	2	3
Hansen, Wash.	Mo.	WL	SX	Criss Cross H 25	4	4	2	3	3	3	3	3	3
Hansen, Wash.	WNY	WL	SX	Criss Cross H 25	4	4	3	2	3	3	4	3	4
Hansen, Wash.	Penna.	WL	SX	Criss Cross H 25	2	2	4	1	3	3	2	2	1
Hansen, Wash.	Tenn.	WL	SX	Criss Cross H 25	4	4	2	4	2	3	4	3	2
Hansen, Wash. (Young, Wisc.)	Wisc.	WL	SX	Criss Cross H 25	3	3	2	1	4	3	4	3	3
Hansen's Leghorn City, Puyallup, Washington													
Hansen, Wash.	Ark.	WL	SX	Criss Cross 61	4	4	3	2	3	3	4	2	2
Hansen, P., Poultry Breeding Farm, Fresno, California													
Hansen, Cal.	Cal. C	AW	BX	One Grade	2	2	1	1	2	2	2	2	1
Hansen, Cal.	Cal. F	AW	BX	One Grade	3	3	1	3	1	2	3	3	1
Hanson, J. A. & Son, Corvallis, Oregon													
Hanson, Ore.	Cal. C	WL	SX	Super Nick	4	3	4	4	4	4	4	2	4
Hanson, Ore.	Cal. F	WL	SX	Super Nick	4	4	3	1	4	4	3	2	4
Hanson, Ore.	N. J.	WL	SX	Super Nick	4	4	2	3	1	4	4	1	3
Harco Orchards & Poultry Farms, So. Easton, Mass.													
Harco, Mass.	Cal. C	RIRxBPR		Sex Link	2	1	2	2	2	2	2	2	2
Harco, Mass.	Cal. F	RIRxBPR		Sex Link	3	2	3	4	1	2	3	3	2
Harco, Mass.	N. H.	RIRxBPR		Sex Link	1	1	1	1	1	1	2	2	4
Harco, Mass.	WNY	RIRxBPR		Sex Link	1	1	1	3	1	2	3	3	1
Harco, Mass. (Davis, N. C.)	N. C.	RIRxBPR		Sex Link	2	3	1	3	2	1	4	2	2
Harco, Mass.	R. I.	RIRxBPR		Sex Link	3	2	1	2	4	2	3	3	2
Hardy, C. Nelson & Son, Essex, Massachusetts													
Hardy, Mass.	N. H.	RIRxBPR		Sex Link	2	4	3	2	3	1	3	3	3



QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADE NAME	INCOME FEED AND OVERHEAD COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Heisdorf & Nelson Farms, Kirkland, Washington														
Sun Valley, Ariz.	.....	Ariz.	WL	SX	Nick Chick	2	2	3	4	3	3	2	1	4
H & N, Wash.	.....	Ark.	WL	SX	Nick Chick	3	2	1	1	2	3	3	2	4
H & N, Wash.	.....	B. C.	WL	SX	Nick Chick	1	2	1	1	1	2	1	1	3
H & N, Wash. (H&N, Cal.)	.....	Cal. C	WL	SX	Nick Chick	4	3	3	2	2	2	2	2	2
H & N, Wash. (H&N, Cal.)	.....	Cal. F	WL	SX	Nick Chick	2	2	3	4	2	2	2	1	2
Oak Crest, Fla.	.....	Fla.	WL	SX	Nick Chick	2	1	1	3	1	3	3	2	3
Oak Crest, Fla.	.....	Fla.	WL	SX	Nick Chick	3	2	1	1	2	4	3	2	2
Pine Acres, Fla.	.....	Fla.	WL	SX	Nick Chick	2	2	1	3	2	4	3	2	3
H & N, Wash.	.....	Iowa	WL	SX	Nick Chick	1	1	3	1	3	3	3	1	1
H & N, Wash.	.....	Kans.	WL	SX	Nick Chick	1	1	2	1	4	3	2	1	2
H & N, Wash. (Lowry, Minn.)	.....	Minn.	WL	SX	Nick Chick	2	2	1	2	1	3	3	2	1
H & N, Wash. (Mo-Ark, Mo.)	.....	Mo.	WL	SX	Nick Chick	2	2	2	1	2	3	2	2	3
H & N, Wash. (Rosecrest, N.Y.)	.....	CNY	WL	SX	Nick Chick	1	1	1	2	1	4	3	1	1
H & N, Wash. (Castleberry, N.C.)	.....	N. C.	WL	SX	Nick Chick	1	1	1	1	4	4	2	1	3
Florin Farms, Penna.	.....	Penna.	WL	SX	Nick Chick	3	3	2	1	2	2	2	2	3
Florin Farms, Penna.	.....	Tenn.	WL	SX	Nick Chick	2	1	1	2	2	4	3	2	1
H & N, Wash. (Strain, Ga.)	.....	Tex.	WL	SX	Nick Chick	1	1	1	3	1	1	2	1	1
Atwood, Texas	.....	Tex.	WL	SX	Nick Chick	1	1	1	1	2	3	2	1	3
Williams, Texas	.....	Wisc.	WL	SX	Nick Chick	1	1	3	3	1	3	1	1	1
H & N, Wash. (Slette, Wisc.)	.....													
Heisdorf & Nelson Farms, Kirkland, Washington														
H & N, Wash. (Pringle, Alta.)	.....	Alta.	WL	SX	Mark II	2	3	3	1	3	1	2	1	1
Sun Valley, Ariz.	.....	Ariz.	WL	SX	Mark II	2	2	3	2	1	2	1	1	1
Frizzell, Fla.	.....	Fla.	WL	SX	Mark II	3	3	3	2	2	3	4	2	4
H & N, Wash. (Mottet's, Mo.)	.....	Mo.	WL	SX	Mark II	2	2	2	1	3	3	1	2	1
H & N, Wash. (Hecht's, N.Y.)	.....	WNY	WL	SX	Mark II	1	1	1	1	2	3	1	2	2
Amstutz, Penna.	.....	Penna.	WL	SX	Mark II	1	1	1	2	1	2	2	1	3
H & N, Wash. (Erving's, Ark.)	.....	Tenn.	WL	SX	Mark II	3	3	2	1	1	2	3	1	1
Vance, Texas	.....	Tex.	WL	SX	Mark II	3	3	4	3	2	1	4	1	2
Heisdorf & Nelson Farms, Kirkland, Washington														
H & N, Wash. (H & N, Cal.)	.....	Cal. C	Syn.xWL	Breed Cross		1	1	1	1	2	1		3	3
H & N, Wash. (H & N, Cal.)	.....	Cal. F	Syn.xWL	Breed Cross	1	1	1	1	1	1	2	2	3	3
Hill Top Poultry Farm, Hawley, Pennsylvania														
Hill Top, Penna.	.....	Penna.	WL	SX	285 A	3	3	3	2	1	2	3	2	1
Hogsett Poultry Breeding Farm, Pomona, California														
Hogsett, Cal.	.....	Cal. C	CGxWL BX	Hogsett		2	2		3	2	2		3	2
Hogsett, Cal.	.....	Cal. F	CGxWL BX	Hogsett	3	3	3	1	3	2	3	3	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED CDST	EGG PRO- DUCTION (Hen housed)	AGE AT 90% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLDD SPOTS (%)
Honegger Breeder Hatchery, Forrest, Illinois														
Honegger, Ill.	.....	Ark.	WL	SX	Honegger Layer	1	1	3	1	3	3	1	2	2
Honegger, Ill.	.....	B. C.	WL	SX	Honegger Layer	4	4	4	4	3	2	3	2	2
Honegger, Ill. (Mortensen, Cal.)	.....	Cal. C	WL	SX	Honegger Layer	3	2	1	1	2	2	1	2	3
Honegger, Ill. (Mortensen, Cal.)	.....	Cal. F	WL	SX	Honegger Layer	1	1	2	3	2	2	1	2	3
Florida Ranch, Fla.	.....	Fla.	WL	SX	Honegger Layer	2	2	4	3	4	4	2	3	2
Pine Air, Fla.	.....	Fla.	WL	SX	Honegger Layer	3	4	2	3	3	3	3	3	2
Honegger, Ill.	.....	Kans.	WL	SX	Honegger Layer	3	4	2	2	1	1	2	3	3
Honegger, Ill. (Peck, Minn.)	.....	Minn.	WL	SX	Honegger Layer	2	4	2	1	4	4	2	2	1
Honegger, Ill.	.....	Mo.	WL	SX	Honegger Layer	2	1	2	2	2	2	2	3	2
Honegger, Ill. (Golden Egg, N.J.)	.....	N. J.	WL	SX	Honegger Layer	2	2	1	2	3	2	1	3	1
Honegger, Ill. (Kasbohm, N.Y.)	.....	CNY	WL	SX	Honegger Layer	2	2	3	4	2	3	1	4	3
Honegger, Ill. (FCX, N.C.)	.....	N. C.	WL	SX	Honegger Layer	1	1	3	1	3	3	1	3	3
Honegger, Ill.	.....	R. I.	WL	SX	Honegger Layer	3	3	1	3	4	3	3	3	3
Honegger, Ill. (Crumley, Tenn.)	.....	Tenn.	WL	SX	Honegger Layer	3	4	2	3	3	3	3	3	3
Flinn's, Texas	.....	Tex.	WL	SX	Honegger Layer	3	3	4	2	3	3	2	2	1
Honegger, Ill. (Sunnyside, Wisc.)	.....	Wisc.	WL	SX	Honegger Layer	2	3	2	1	3	3	2	3	3
Honegger Breeder Hatchery, Forrest, Illinois														
Honegger, Ill.	.....	Mo.	WL	SX	Honegger Layer #62	2	2	1	3	3	3	2	1	2
Honegger, Ill.	.....	Tenn.	WL	SX	Honegger Layer #62	1	1	1	2	4	4	1	2	3
Clary's, Texas	.....	Tex.	WL	SX	Honegger Layer #62	3	2	2	2	3	3	4	2	4
Honegger Breeder Hatchery, Forrest, Illinois														
Pine Air, Fla.	.....	Fla.	WL	SX	H-562	3	2	3	2	4	4	3	3	3
Hubbard Farms, Walpole, New Hampshire														
Hubbard, N.H.	.....	N. H.	WL	BX	Comet	2	2	1	4	3	4	3	2	1
Hubbard, N.H.	.....	WNY	WL	BX	Comet	2	2	2	2	3	3	3	1	1
Hubbard, N.H. (Hubbard, N.C.)	.....	N. C.	WL	BX	Comet	2	2	1	3	3	2	3	3	1
Hubbard, Penna.	.....	Penna.	WL	BX	Comet	3	3	1	2	4	2	4	3	4
Hy-Line Poultry Farms, Des Moines, Iowa														
Rothway, Ariz.	.....	Ariz.	WL	INX	Hy-Line 934 C	1	1	1	2	1	1	1	4	3
Hy-Line, Iowa	.....	Ark.	WL	INX	Hy-Line 934 C	2	2	1	2	3	2	1	4	1
Hy-Line, Iowa (Quinn, Cal.)	.....	Cal. C	WL	INX	Hy-Line 934 C	2	2	2	2	3	3	1	3	2
Hy-Line, Iowa (Quinn, Cal.)	.....	Cal. F	WL	INX	Hy-Line 934 C	1	1	1	1	2	3	1	4	2
Hy-Line, Iowa	.....	Mo.	WL	INX	Hy-Line 934 C	1	1	2	1	2	2	1	4	2
Hy-Line, Iowa (Smith, Tenn.)	.....	Tenn.	WL	INX	Hy-Line 934 C	1	1	2	1	1	1	1	4	2
Hy-Line, Iowa (Preston, Wisc.)	.....	Wisc.	WL	INX	Hy-Line 934 C	2	1	2	1	2	1	2	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEE CHICK	Egg Pro- duction (Hens housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	Egg WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Hy-Line Poultry Farms, Des Moines, Iowa														
Rothway, Ariz.		Ariz.	INX	Hy-Line 934 H	1	1	3	2	1	1	1	2	3	1
Hy-Line, Iowa		Ark.	INX	Hy-Line 934 H	1	1	1	2	1	2	2	1	4	1
Hy-Line, Iowa (Poehlmann, Cal.)		Cal. C	INX	Hy-Line 934 H	1	1	1	1	1	3	2	1	3	1
Hy-Line, Iowa (Poehlmann, Cal.)		Cal. F	INX	Hy-Line 934 H	1	1	3	1	1	3	3	1	3	2
Hy-Line, Iowa (Hy-Line, Ont.)		C. C.	INX	Hy-Line 934 H	1	1	2	1	1	2	1	1	4	2
Wallace, Fla.		Fla.	INX	Hy-Line 934 H	1	1	2	2	1	4	4	1	4	1
Hy-Line, Iowa		Iowa	INX	Hy-Line 934 H	2	2	2	3	3	2	2	1	4	4
Coombs, Kansas		Kans.	INX	Hy-Line 934 H	3	3	1	1	3	3	3	3	4	3
Hy-Line, Minn.		Minn.	INX	Hy-Line 934 H	2	1	1	2	2	3	3	1	4	1
Hy-Line, Iowa		Mo.	INX	Hy-Line 934 H	3	3	1	1	3	2	3	3	4	3
Hy-Line, Iowa (Wallace, Pa.)		N. H.	INX	Hy-Line 934 H	2	1	1	2	2	3	3	1	4	2
Hy-Line, Iowa (Wallace, Pa.)		N. J.	INX	Hy-Line 934 H	1	1	2	3	3	3	3	1	4	1
Farvue Farms, N.Y. (Neuhauser, N.Y.)		CNY	INX	Hy-Line 934 H	1	1	1	2	1	4	3	1	4	2
Farvue Farms, N.Y. (Neuhauser, N.Y.)		WNY	INX	Hy-Line 934 H	2	2	1	3	2	3	3	1	4	3
Hy-Line, Iowa (Tar Heel, N.C.)		N. C.	INX	Hy-Line 934 H	2	2	2	1	2	4	4	1	4	3
Wallace, Penna.		Penna.	INX	Hy-Line 934 H	1	1	3	2	2	2	2	2	4	3
Wallace, Penna.		Penna.	INX	Hy-Line 934 H	2	2	1	3	3	3	2	1	4	1
Hy-Line, Iowa (Wallace, Pa.)		R. I.	INX	Hy-Line 934 H	1	1	2	3	2	3	3	1	4	3
Wallace, Iowa (Smith, Tenn.)		Tenn.	INX	Hy-Line 934 H	1	1	2	1	3	3	2	1	4	2
Hy-Lay, Texas		Tenn.	INX	Hy-Line 934 H	1	1	3	3	2	2	1	1	4	3
Kazmeier, Texas		Tex.	INX	Hy-Line 934 H	3	2	1	1	2	2	2	3	4	2
Wilson, Texas		Tex.	INX	Hy-Line 934 H	1	1	3	2	2	1	1	1	4	1
Hy-Line, Iowa (Preston, Wisc.)		Wisc.	INX	Hy-Line 934 H	3	2	2	2	2	2	2	2	3	1
Hy-Line Poultry Farms, Des Moines, Iowa														
Wallace, Fla.		Fla.	INX	Hy-Line 950	4	4	2	3	3	2	2	2	3	2
Zollicker, Mo (Hy-Line, Iowa)		Mo.	INX	Hy-Line 950	3	2	1	1	2	2	2	2	4	1
Ideal Hatchery & Poultry Farm, Cameron, Texas														
Ideal, Texas		Ark.	WL	Ideal H-3-W	3	4	4	2	3	1	1	3	3	3
Ideal, Texas		Cal. C	WL	Ideal H-3-W	2	3	3	3	3	2	2	1	2	3
Ideal, Texas		Cal. F	WL	Ideal H-3-W	2	3	3	2	1	1	1	2	3	4
Intercontinental, Fla.		Fla.	WL	Ideal H-3-W	2	2	2	3	3	2	2	2	4	2
Ideal, Texas		Iowa	WL	Ideal H-3-W	2	2	4	2	2	1	1	2	4	2
Ideal, Texas (Jack Frost, Minn.)		Minn.	WL	Ideal H-3-W	1	1	3	3	1	1	1	2	3	2
Ideal, Texas		Mo.	WL	Ideal H-3-W	1	1	3	3	1	2	1	2	3	4
Ideal, Texas (Dav-El, N.J.)		N. J.	WL	Ideal H-3-W	3	3	3	3	4	2	3	2	3	2
Ideal, Texas		CNY	WL	Ideal H-3-W	2	2	3	3	3	3	2	2	3	4
Ideal, Texas		Penna.	WL	Ideal H-3-W	2	2	3	1	4	2	2	1	3	3
Ideal, Texas		R. I.	WL	Ideal H-3-W	4	4	4	2	2	2	2	3	2	2
Ideal, Texas		Tenn.	WL	Ideal H-3-W	2	3	3	2	3	2	2	2	3	4
D & C, Texas		Tex.	WL	Ideal H-3-W	3	3	4	3	4	2	1	2	2	4
Golden Oak, Texas		Tex.	WL	Ideal H-3-W	4	4	1	3	4	1	1	3	3	1
Ideal, Texas		Tex.	WL	Ideal H-3-W	2	2	2	4	2	1	1	2	3	4
Ideal, Texas (Dalzell, Wisc.)		Wisc.	WL	Ideal H-3-W	2	2	2	4	2	1	1	2	3	4

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADE NAME	INCOME OVER FEED AND CHICK COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Ideal Hatchery & Poultry Farm, Cameron, Texas													
Ideal, Texas	Ark.	WL SX	Ideal Cross	2	2	3	2	3	3	3	3	3	3
Dirkse, Mich. (Ideal, Tex.)	Mo.	WL SX	Ideal Cross	3	3	3	1	4	3	3	2	3	2
Dirkse, Mich.	R. I.	WL SX	Ideal Cross	3	3	3	2	4	3	2	2	4	3
Kahn, Max, Toms River, New Jersey													
Kahn, N. J.	N. J.	WL SX	Kahn	2	1	3	3	2	1	2	3	4	3
Kerr, Dr., Hatcheries, Minnesota, Minnesota													
Dr. Kerr, Minn.	Mo.	WL IN	409 C	2	2	1	1	3	3	3	2	4	3
Keystone Poultry Breeding Farm, Ephrata, Penna.													
Keystone, Penna.	CNY	WL SX	Park's Keystone	3	4	4	1	1	1	1	3	4	2
Keystone, Penna.	Penna.	WL SX	Park's Keystone	1	2	3	3	1	2	2	2	2	2
Kimber Farms, Inc., Fremont, California													
Ariz. State, Ariz.	Ariz.	WL SX	Kimber K 137	2	2	1	1	2	2	1	1	1	2
Kimber, Cal. (Kimber, Pomona, Cal.)	Cal. C	WL SX	Kimber K 137	2	2	2	2	2	2	1	1	1	2
Kimber, Cal. (Kimber, Pomona, Cal.)	Cal. F	WL SX	Kimber K 137	2	2	2	3	1	1	2	1	1	3
Florida State, Fla.	Fla.	WL SX	Kimber K 137	2	3	1	1	3	1	1	2	1	1
Bloomingtondale, Fla.	Fla.	WL SX	Kimber K 137	2	1	4	2	2	1	1	2	2	2
Kimber, Cal.	Iowa	WL SX	Kimber K 137	3	2	2	2	2	1	1	1	1	1
Kimber, Cal.	Kans.	WL SX	Kimber K 137	3	3	2	2	2	1	1	2	1	1
Kimber, Minn.	Minn.	WL SX	Kimber K 137	2	2	1	3	2	2	2	2	1	2
Kimber, Cal. (Mo. Valley, Mo.)	Mo.	WL SX	Kimber K 137	1	2	2	1	1	2	2	1	1	3
Kimber, Cal. (Larry's, N.Y.)	CNY	WL SX	Kimber K 137	3	3	2	3	2	2	3	3	1	1
Kimber, Cal. (Hubbard, N.C.)	N. C.	WL SX	Kimber K 137	2	1	1	1	1	2	2	1	2	2
Longenecker, Penna.	Penna.	WL SX	Kimber K 137	1	2	2	1	2	3	2	2	1	2
Kimber, Cal. (Hubbard, N.H.)	R. I.	WL SX	Kimber K 137	1	1	1	2	2	2	2	1	1	2
Kimber, Cal. (Nichols, Tenn.)	Tenn.	WL SX	Kimber K 137	1	1	1	2	1	2	1	1	1	2
Western, Tex.	Tex.	WL SX	Kimber K 137	2	2	1	1	2	2	2	3	1	1
Kimber, Cal. (Wilke's, Wisc.)	Wisc.	WL SX	Kimber K 137	3	2	2	1	2	2	2	3	1	3
Kimber Farms, Inc., Fremont, California													
Kimber, Cal. (Kimber, Pomona, Cal.)	Cal. C	WL SX	Kimber K 141	2	2	2	1	1	4	3	2	2	4
Kimber, Cal. (Kimber, Pomona, Cal.)	Cal. F	WL SX	Kimber K 141	2	2	1	1	3	3	3	2	3	3
Kimber Farms, Inc., Fremont, California													
Ariz. State, Ariz.	Ariz.	WL SX	Kimber K 155	2	2	2	1	3	3	3	2	1	4
Kimber, Cal.	B. C.	WL SX	Kimber K 155	1	1	1	2	1	1	2	1	1	1
Miami International, Fla.	Fla.	WL SX	Kimber K 155	4	3	1	3	3	2	2	4	2	2
Kimber, Cal. (Mo. Valley, Mo.)	Mo.	WL SX	Kimber K 155	3	2	2	1	3	2	2	3	2	3
Kimber, Cal. (Dover Farms, N.J.)	N. J.	WL SX	Kimber K 155	3	2	1	1	4	2	3	2	1	2
Hubbard, Penna.	Penna.	WL SX	Kimber K 155	2	2	2	2	2	3	3	3	2	2
Nichols, Tenn.	Tenn.	WL SX	Kimber K 155	2	1	1	2	2	3	4	2	2	2
Western, Tex.	Tex.	WL SX	Kimber K 155	4	3	2	2	2	3	2	4	1	3
Kimber, Cal. (Meadow View, Wisc.)	Wisc.	WL SX	Kimber K 155	1	1	1	2	1	2	2	1	2	2



QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING		STRAIN OR TRADE NAME	INCOME OVER FEED COST	EGG PRO- DUCTION (Hens housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)	
Kingstowne Poultry Farm, No. Kingston, Rhode Island																
Kingstowne, R. I.	.....	R. I.	RIR	PS	Kingstowne	4	4	4	3	4	1	1	4	1	2	
Klongland Hatchery, Stoughton, Wisconsin																
Klongland, Wisc.	.....	Wisc.	CGxWL BX	K Cross		2	1	1	2	3	2	3	2	4	1	
Kruger's Poultry Breeding Farm, Dinuba, California																
Kruger, Cal.	.....	Cal. C	RIRxWLBX	Egg Champ		3	4	3	4	3	2	2		2	2	
Kruger, Cal.	.....	Cal. F	RIRxWLBX	Egg Champ		3	4	3	4	2	2	2	3	2	2	
Lambert, M., Bright, Ontario																
Lambert, Ont.	.....	C. C.	RIRxCR BX	Gold Cross		2	2	2	1	2	2	2	3	1	3	
Lawton, A. C. & Sons, Foxboro, Massachusetts																
Lawton, Mass.	.....	N. H.	RIRxWPR	Buff Sex Link		2	4	3	3	1	1	1	3	1	3	
Lawton, Mass.	.....	WNY	RIRxWPR	Buff Sex Link		1	2	3	2	1	1	1	3	3	1	
Lawton, Mass.	.....	R. I.	RIRxWPR	Buff Sex Link		1	1	3	1	1	1	1	3	3	3	
Leader, Guy A. & Sons, Inc., York, Pennsylvania																
Leader, Penna.	.....	Penna.	WL	SX	8X		2	3	3	3	3	2	2	2	2	
Leader, Guy A. & Sons, Inc., York, Pennsylvania																
Leader, Penna.	.....	WNY	WL	SX	10X		2	3	3	4	3	2	1	2	2	
Leader, Penna.	.....	Penna.	WL	SX	10X		3	3	3	4	3	2	3	3	2	
Leader, Guy A. & Sons, Inc., York, Pennsylvania																
Leader, Penn.	.....	N. J.	WL	SX	14X		4	4	4	3	4	2	1	4	1	3
Lone Pine Farm, Berwick, Nova Scotia																
Lone Pine, Nova Scotia	.....	C. C.	RIRxLS BX	Lone Pine		3	3	3	2	2	2	1	4	2	1	
Lux Leghorn Land Farms, Hopkinton, Iowa																
Lux, Iowa	.....	Mo.	WL	SX	H-D-6		3	3	3	1	2	3	3	3	2	
Lux, Iowa	.....	CNY	WL	SX	H-D-6		2	3	2	2	1	2	3	3	3	
Lux, Iowa	.....	Wisc.	WL	SX	H-D-6		3	3	2	1	2	2	3	3	4	
MacDonald, C. E., Cody's, New Brunswick																
MacDonald, N.B.	.....	N. B.	RIRx(LSxRIR)	MacDonald		3	3	4	4	3	3	3	4	4	3	
Manitoba ROP Hatchery, Winnipeg, Manitoba																
Manitoba ROP, Man.	.....	B. C.	WL	SX	Keyline 110		4	4	1	3	3	2	3	1	2	
Manitoba ROP, Man.	.....	C. C.	WL	SX	Keyline 110		3	4	3	3	3	1	2	3	2	
Manitoba ROP Hatchery, Winnipeg, Manitoba																
Manitoba ROP, Man.	.....	C. C.	WL	SX	Keyline 110 A		3	3	1	2	2	1	2	1	3	
Manitoba ROP Hatchery, Winnipeg, Manitoba																
Manitoba ROP, Man.	.....	C. C.	BRxLS BX	Keyline 230		4	4	4	4	4	4	4	4	2	4	
Maple Dale Hatchery, Austin, Minnesota																
Maple Dale, Minn.	.....	Minn.	WL	SX	#253		1	1	2	1	3	1	1	1	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADENAME	INCOME PER CHICK (\$)	EGG PRODUCTION (No.)	AGE AT LAYING (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Mathews Poultry Farm, Burlington, Wisconsin														
Mathews, Wisc.		Wisc.	WL	SX	M 138	3	3	3	4	3	1	1	2	3
McIsaac, J. Donald, East Florenceville, New Brunswick														
McIsaac, N.B.		N. B.	WL	SX	Electric	2	2	2	1	3	3	1	2	1
McIsaac, J. Donald, East Florenceville, New Brunswick														
McIsaac, N.B.		N. B.	RIRxWL	Electric 220	1	2	2	2	2	2	2	1	3	1
Merryknoll Farms, Attleboro, Massachusetts														
Merryknoll, Mass.		N. H.	RIRxBPR	Merryknoll 400	2	4	3	1	3	1	1	1	4	4
Nelson, George F., Truro, Nova Scotia														
Niles Poultry Breeding Farm, Niles, California		N. B.	RIRxLS BX	Nelson	1	2	1	1	1	1	1	1	3	2
Niles, Cal.		Cal. C	WL	SX	Niles	3	2		2	3	3		2	3
Niles, Cal.		Cal. F	WL	SX	Niles	3	4	3	1	2	2	3	2	2
Niles Poultry Breeding Farm, Niles, California														
Niles, Cal.		Cal. C	CGxWL BX	Commercial	2	2	2		2	2	2		3	3
Niles, Cal.		Cal. F	CGxWL BX	Commercial	3	3	2	1	3	1	2	3	3	2
Noble Bros., Orangeville, Ontario														
Noble, Ont.		C. C.	WL	SX	N-60	2	2	3	1	2	2	3	2	2
Norco Poultry Breeding Farm, Norco, California														
Norco, Cal.		Cal. C	WL	PS	Grade AA	3	3		2	2	2		1	2
Norco, Cal.		Cal. F	WL	PS	Grade AA	3	3	2	1	3	2	3	2	3
Norris, Vernon, Valencia, Pennsylvania														
Norris, Penna.		Penna.	WL	PS	Efficiency Leghorns	3	4	3	1	3	3	2	1	1
North Central Regional USDA Lab., Lafayette, Indiana														
North Central, Ind.		Cal. C	RIRxWL	Random Bred Cross	3	3	3		3	4	1		3	2
North Central, Ind.		Cal. F	RIRxWL	Random Bred Cross	4	3	3	3	3	3	3	4	3	2
North Central Regional USDA Lab., Lafayette, Indiana														
North Central, Ind.		R. I.	RIR	PS	Random Bred Reds	4	3	3	2	2	2	4	2	3
Ontario Agricultural College, Guelph, Ontario														
Ontario Agri. College, Ont.		B. C.	WL	SX	Strain Cross	3	2	4	4	1	2	1	2	1
Ottawa Central Experimental Farm, Ottawa, Ontario														
Ottawa, Ont.		C. C.	WL	PS	Random Bred	3	3	3	1	3	4	3	2	3
Ottawa, Ont.		C. C.	WL	PS	Random Bred	3	3	3	2	3	4	3	2	4
Ottawa, Ont.		WNY	WL	PS	Random Bred	4	4	4	3	2	4	4	2	3
Parmenter Reds, Inc., Franklin, Massachusetts														
Parmenter, Mass.		N. H.	RIR	SX	PM 1	3	3	3	4	1	3	3	4	2
Parmenter, Mass.		N. C.	RIR	SX	PM 1	4	4	3	4	3	3	2	4	2
Parmenter, Mass.		R. I.	RIR	SX	PM 1	3	3	3	3	3	3	3	2	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEE AND CHICK COST (\$)	EGG PRO- DUCTION (Hens housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEES PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Peerless Hatchery, Spencer, Iowa	Cal. C	WL	SX	Peerless 262	2	3	3	3	3	3	3	2	2
Peerless, Iowa	Cal. F	WL	SX	Peerless 262	2	3	1	3	3	3	2	2	2
Peerless, Iowa	Mo.	WL	SX	Peerless 262	4	3	3	4	4	3	4	2	3
Penna. Farm Bureau Hatchery, Harrisburg, Penna.	WNY	WL	SX	LSC 55	1	1	3	2	2	2	1	1	1
Penna. F. B., Penna.	Penna.	WL	SX	LSC 55	3	1	4	3	4	3	3	1	3
Penna. F. B., Penna.	Penna.	WL	SX	LSC 55	3	1	4	3	4	3	3	1	3
Penna. Farm Bureau Hatchery, Harrisburg, Penna.	Penna.	WL	SX	LSC 60	1	1	2	1	3	3	1	1	1
Penna. F. B., Penna.	Penna.	WL	SX	LSC 60	1	1	2	1	3	3	1	1	1
Pillsbury Company, Clinton, Iowa	Cal. C	WL	SX	Maxi Lay Queens	4	4	4	4	2	2	2	1	3
Pillsbury, Cal. (A&M, Cal.)	Cal. F	WL	SX	Maxi Lay Queens	1	2	3	3	2	2	2	1	3
Pillsbury, Cal. (A&M, Cal.)	Minn.	WL	SX	Maxi Lay Queens	2	2	3	2	3	1	2	2	3
Pillsbury, Minn.	Mo.	WL	SX	Maxi Lay Queens	4	4	1	2	2	1	3	1	2
Pillsbury, Minn. (Bell & Croley, Mo.)	Cal. C	Syn. xWL	Silver X Leghorn	2	2	2	1	1	2	3	3	2	2
Pollard, Cal.	Cal. F	Syn. xWL	Silver X Leghorn	3	3	2	3	2	3	3	3	2	3
Pollard, Cal.	C. C.	LSxWL BX	Triline	3	2	1	1	2	4	4	3	3	3
Purdy, Miss H. M., Balcarres, Saskatchewan	Cal. C	CGxWL BX	Randall	2	2	2	4	4	3	3	3	2	3
Purdy, Saskatchewan	Cal. F	CGxWL BX	Randall	2	2	2	3	2	3	3	3	2	3
Randall Hatchery & Breeding Farm, Montclair, N. J.	B. C.	WL	SX	Rapp Linecross	2	3	1	1	1	1	2	2	1
Randall, Cal.	Fla.	WL	SX	Rapp Linecross	1	1	3	1	3	2	2	4	3
Randall, Cal.	Iowa	WL	SX	Rapp Linecross	3	4	4	4	3	3	3	3	3
Rapp Leghorn Farm, Farmingdale, New Jersey	Mo.	WL	SX	Rapp Linecross	1	1	2	3	2	2	2	2	2
Rapp, N. J.	N. J.	WL	SX	Rapp Linecross	3	3	4	1	2	3	2	3	3
Rapp, N. J.	CNY	WL	SX	Rapp Linecross	4	4	3	3	3	3	4	4	2
Rapp, N. J. (Kostinen, N. Y.)	WNY	WL	SX	Rapp Linecross	3	3	2	2	3	3	2	4	4
Rapp, N. J. (Meadowview, N. J.)	N. C.	WL	SX	Rapp Linecross	3	3	4	2	2	1	3	2	2
Rapp, N. J.	Tenn.	WL	SX	Rapp Linecross	3	4	2	2	2	1	3	3	4
Rapp, N. J.	Wis.	WL	SX	Rapp Linecross	3	4	4	4	3	3	3	2	3
Rapp, N. J. (Ward, Iowa)	C. C.	WL	SX	Raynor R-60	2	3	2	3	3	3	2	3	3
Raynor, Ralph, Charlottetown, Prince Edward Island	N. B.	WL	SX	Raynor R-60	2	2	3	1	2	4	1	3	1
Raynor, P. E. I.													
Raynor, P. E. I.													

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE (%)	FEED PER EGG OZ PER 24-OZ. (lb)	ALBUMEN QUALITY (H.U.)	SPOTS BLOOD (%)
Richardson Poultry Breeding Farm, Redlands, California													
Richardson, Cal.	Cal. C	WA	BX	Commercial	1	1	1	1	4	3	4	4	2
Richardson, Cal.	Cal. F	WA	BX	Commercial	2	1	3	1	4	4	3	4	2
Richardson Poultry Breeding Farm, Redlands, California													
Richardson, Cal.	Cal. C	WA	BX	Commercial MWA	3	2	3	3	3	3	3	4	2
Richardson, Cal.	Cal. F	WA	BX	Commercial MWA	3	2	3	4	1	3	3	4	1
Riddle Spring Poultry Farm, Manchester, New Hampshire													
Riddle Spring, N.H.	N. H.	BX	Super Triway	2	4	3	3	1	2	2	4	1	1
Santa Clara Rialto Hatchery, Rialto, California													
Santa Clara, Cal.	Cal. C	CGxWL BX	Santa Clara		1	2	1	1	2	3	4	3	2
Santa Clara, Cal.	Cal. F	CGxWL BX	Santa Clara	3	3	3	1	3	1	2	3	3	2
Scattered Acres Hatchery, Hanover, Ontario													
Scattered Acres, Ont.	C. C.	WLx(BLxLS)	Hanover 30	3	3	2	3	3	2	2	3	3	2
Schaible, Louis D., Shiloh, New Jersey													
Schaible, N. J.	Mo.	WL	SX	Commercial 2	2	2	3	3	3	3	2	2	3
Schaible, N. J.	Penna.	WL	SX	Commercial 2	1	2	2	2	3	2	2	3	1
Schaible, Louis D., Shiloh, New Jersey													
Schaible, N. J.	Mo.	WL	SX	K Cross	3	3	4	1	2	2	3	1	3
Schaible, N. J.	N. J.	WL	SX	K Cross	3	3	3	2	3	2	1	2	4
Schaible, N. J.	CNY	WL	SX	K Cross	3	4	4	3	2	1	2	3	1
Schaible, N. J.	Penna.	WL	SX	K Cross	2	2	2	3	2	2	2	2	1
Schaible, N. J.	Tenn.	WL	SX	K Cross	3	3	2	2	3	3	3	1	1
Schaible, N. J.	Tex.	WL	SX	K Cross	2	3	3	2	2	1	3	2	2
Schildmeyer's Poultry Breeding Farm, Orange, California													
Schildmeyer, Cal.	Cal. C	CGxWL	Commercial		2	3	3	3	3	3	4	3	3
Schildmeyer, Cal.	Cal. F	CGxWL	Commercial	3	3	1	3	4	3	4	3	4	3
Schildmeyer's Poultry Breeding Farm, Orange, California													
Schildmeyer, Cal.	Cal. C	Syn. xWL	S-44		3	3	3	2	4	4	3	3	2
Schildmeyer, Cal.	Cal. F	Syn. xWL	S-44	3	4	2	3	4	4	4	3	4	3
Searle, Clarence, Centre Napan, New Brunswick													
Searle, N. B.	N. B.	RIRxCR	Red Cross	3	3	4	1	2	1	1	3	1	3



QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION		TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEE AND CHICK COST (\$)	EGG PRO- DUCTION (No.)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	(%) BLOOD SPOTS
Shaver Poultry Breeding Farm, Galt, Ontario														
Shaver, Ont.	.....	Alta.	WL	SX	Starcross 288	1	1	3	2	4	1	1	2	1
Shaver, Ont.	.....	B. C.	WL	SX	Starcross 288	2	2	2	2	3	2	1	2	2
Shaver, Ont.	.....	Cal. C	WL	SX	Starcross 288	1	2	1	1	2	1	1	3	3
Shaver, Ont.	.....	Cal. F	WL	SX	Starcross 288	1	3	1	1	1	2	2	3	2
Shaver, Ont.	.....	C. C.	WL	SX	Starcross 288	1	1	2	2	2	2	1	3	3
Shaver, Ont.	.....	Iowa	WL	SX	Starcross 288	1	1	2	3	1	1	2	2	4
Shaver, Ont.	.....	Mo.	WL	SX	Starcross 288	1	1	2	1	2	2	1	3	1
Shaver, Ont.	.....	N. B.	WL	SX	Starcross 288	1	1	1	2	1	3	3	1	3
Shaver, Ont.	.....	N. H.	WL	SX	Starcross 288	3	1	2	2	3	4	1	2	3
Shaver, Ont.	.....	N. J.	WL	SX	Starcross 288	1	1	2	3	3	2	2	1	3
Shaver, Ont.	.....	WNY	WL	SX	Starcross 288	2	1	2	1	2	3	1	3	3
Greider, Penna.	.....	Penna.	WL	SX	Starcross 288	1	1	2	2	1	3	2	3	1
Shaver, Ont.	.....	R. I.	WL	SX	Starcross 288	2	2	3	1	3	3	2	1	2
Shaver, Ont.	.....	Tenn.	WL	SX	Starcross 288	1	1	2	2	3	3	3	1	2
Swift & Co., Wisc.	.....	Wisc.	WL	SX	Starcross 288	3	3	3	4	3	1	1	2	2
Shaver Poultry Breeding Farm, Galt, Ontario														
Greider, Penna.	.....	Penna.	WL	SX	3-W	3	3	3	3	2	2	3	3	3
Smith, James, Nanaimo, British Columbia														
Smith, B.C.	.....	B. C.	WL	SX	501 X 507	4	3	2	3	4	4	4	4	4
Starline Breeders Hatchery, Saskatoon, Saskatchewan														
Starline, Saskatchewan	.....	Alta.	CGxWL	Pearlette	3	3	1	1	2	4	4	3	4	1
Starline, Saskatchewan	.....	C. C.	CGxWL	Pearlette	1	1	1	1	2	2	3	1	4	1
Stever Poultry Farm, Huntingdon, Pennsylvania														
Stever, Penna.	.....	Penna.	WL	SX	303	3	3	3	1	3	3	3	4	3
Stone Bros. Hatchery, Medelia, Minnesota														
Stone, Minn.	.....	Minn.	WL	SX	Stone 158	2	3	3	4	2	1	1	2	2
Stone's Poultry Farm, Dinuba, California														
Stone, Cal.	.....	Cal. C	WL	SX	H 56	2	2	2	2	2	2	1	1	2
Stone, Cal.	.....	Cal. F	WL	SX	H 56	1	1	2	1	2	2	2	2	3
Sunnyside Hatchery, Watertown, Wisconsin														
Sunnyside, Wisc.	.....	Wisc.	CGxWL	Wisco White	4	4	2	2	4	3	3	4	4	1
Swift & Co., Chicago, Illinois														
Swift, Minn.	.....	Minn.	WL	SX	Ski-Hi 316	3	3	4	3	4	2	4	3	4
Swift, Texas	.....	Tex.	WL	SX	Ski-Hi 316	3	3	4	3	1	2	1	3	4
Townline Poultry Farm, Zeeland, Michigan														
Townline, Mich.	.....	Mo.	WL	SX	SC 30	3	3	4	4	2	3	2	3	2
Townline, Mich.	.....	Penna.	WL	SX	SC 30	2	2	2	1	3	3	1	2	4

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEE AND CHICK COST (\$)	EGG PRO- DUCTION (Hen housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Triska, Eric, Edmonton, Alberta													
Triska, Alta.	Alta.	WL SX	Belmont 292	1	2	3	3	4	4	2	1	2	2
Triska, Alta.	B. C.	WL SX	Belmont 292	3	3	3	4	4	2	3	3	1	2
Triska, Alta.	C. C.	WL SX	Belmont 292	3	3	3	3	3	2	2	2	3	3
Triska, Eric, Edmonton, Alberta													
Triska, Alta.	Alta.	WL SX	Belmont 292 A	2	2	3	2	1	2	2	2	4	2
Truway Farms, East Berlin, Pennsylvania													
Truway, Penna.	CNY	WL SX	Trubred 21	3	4	4	4	3	1	1	2	1	1
Truway, Penna.	Penna.	WL SX	Trubred 21	4	4	4	3	3	3	3	4	2	3
University of Missouri, Columbia, Missouri													
University of Mo.	Mo.	WL PS	Intra Flock	3	2	2	4	2	4	4	3	3	3
Vancrest Farms, Hyde Park, New York													
Vancrest, N. Y.	WNY	RIRxNH	All Red	3	3	4	2	3	2	2	4	1	1
Ward Poultry Farm, Independence, Iowa													
Ward, Iowa	Mo.	BX	Wardcrist 356	4	4	4	3	3	3	2	4	3	2
Warren, J. J., North Brookfield, Massachusetts													
Warren, Mass.	Ark.	WL SX	Warren Darby DX	2	2	4	2	1	3	2	2	2	4
Warren, Mass.	Mo.	WL SX	Warren Darby DX	3	3	4	3	1	3	2	3	3	4
Warren, Mass. (Woodward, N. J.)	N. J.	WL SX	Warren Darby DX	3	3	4	4	3	2	2	4	3	4
Warren, Mass. (Hall Bros, Conn.)	CNY	WL SX	Warren Darby DX	3	3	4	3	1	2	2	3	3	3
Dirkse, Mich.	Penna.	WL SX	Warren Darby DX	3	2	2	3	3	4	4	2	3	2
Warren, Mass.	Tenn.	WL SX	Warren Darby DX	3	4	4	2	2	2	1	4	2	4
Dirkse, Mich.	Wisc.	WL SX	Warren Darby DX	2	3	4	1	3	1	1	2	2	3
Warren, J. J., North Brookfield, Massachusetts													
Warren, Mass. (Bundesen, Cal.)	Cal. C	WLxSyn.	BX Warren J-J	2	2	3		2	2	2		4	2
Warren, Mass. (Bundesen, Cal.)	Cal. F	WLxSyn.	BX Warren J-J	3	3	4	1	3	3	3	3	4	4
Warren, Mass.	Penna.	WLxSyn.	BX Warren J-J	1	2	3	2	1	2	2	1	3	1
Warren, J. J., North Brookfield, Massachusetts													
Warren, Mass. (Bundesen, Cal.)	Cal. C	RIRxRIW	BX Sex-Sal-Link		4	3		3	3	3		3	1
Warren, Mass. (Bundesen, Cal.)	Cal. F	RIRxRIW	BX Sex-Sal-Link	3	3	3	3	3	3	3	3	4	1
Warren, Mass.	N. H.	RIRxRIW	BX Sex-Sal-Link	3	3	3	1	3	2	3	2	3	1
Warren, Mass.	WNY	RIRxRIW	BX Sex-Sal-Link	1	3	4	1	2	1	2	1	2	1
Warren, Mass. (Warren, S. C.)	N. C.	RIRxRIW	BX Sex-Sal-Link	2	3	3	3	3	2	2	2	2	1
Warren, Mass. (Swift & Co., Ia.)	Wisc.	RIRxRIW	BX Sex-Sal-Link	2	4	3	3	2	2	2	4	2	1
Warren, J. J., North Brookfield, Massachusetts													
Warren, Mass. (Warren, Mass.)	R. I.	RIRxRIW	BX Sex-Sal-F	1	2	3	1	1	1	1	1	1	1
Webster Poultry Farms, Auburn, New York													
Webster, N. Y.	WNY	RIR PS	Certified	2	3	4	2	4	3	2	3	1	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST (Continued)

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADE NAME	INCOME OVER FEE AND CHICK COST (\$)	EGG PRO- DUCTION (Hen housed)	AGE AT 50% PRO- DUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Wells, George E. & Son, Inc., New Milford, Conn.	N. H.	RIRxBPR	Black Sex Link	2	4	4	1	1	2	2	4	3	2
Wells, Conn.													
Welp's Breeding Farm, Bancroft, Iowa	Ark.	WL SX	Welp 901	3	4	4	4	3	3	3	2	1	1
Welp, Iowa													
Welp's Breeding Farm, Bancroft, Iowa	Ark.	WL SX	Welp 937	1	2	2	1	2	2	1	1	3	1
Stetzel's, Ark.	Cal. C	WL SX	Welp 937		3	2		3	2	3		3	2
Welp, Iowa	Cal. F	WL SX	Welp 937	1	1	2	4	1	3	3	1	3	2
Welp, Iowa	Iowa	WL SX	Welp 937		1	2	1	1	2	2		3	
White Farms, Corona, California	Cal. C	CGxWL BX	White		2	2		3	1	1		2	2
White, Cal.	Cal. F	CGxWL BX	White	2	2	3	3	3	1	2	3	2	2
White, Cal.													
Wirtz Bros. Leghorn Farm, Lebanon, New Jersey	N. J.	WL LX	Linecross	3	3	2	1	1	2	3	4	3	2
Wirtz, N.J.													
Wolf's Hatchery, Bloomsburg, Pennsylvania	Penna.	WL SX	Wolf's BJ	3	3	2	1	2	3	3	3	2	1
Wolf, Penna.													
Wood Poultry Breeding Farm, Pomona, California	Cal. C	AW BX	Commercial		2	1		3	3	3		2	1
Wood, Cal.	Cal. F	AW BX	Commercial	3	4	2	1	2	3	3	3	2	1
Wood, Cal.													
Zewan, William G., Nicholson, Pennsylvania	Penna.	WL SX	Strain B	3	3	3	1	3	2	2	3	4	4
Zewan, Penna.													

OFFICIAL STANDARD EGG LAYING TESTS  
1961-62

Missouri - Missouri Egg Laying Test, Mountain Grove, Charles McElyea, Supervisor

New York - New York State Egg Laying Test, Farmingdale, Long Island, R. R. Stockbridge,  
Supervisor

Two Official Standard Egg Laying Tests operate under a uniform set of rules which were adopted by and are revised by the Council of American Official Poultry Tests. It must be recognized that these rules cover only certain phases of the test procedures. Such things as feeding programs, lighting and other management details are determined by the local test supervisor.

It also should be recognized that mature pullets are entered in standard tests. This means that each breeder hatched, reared and selected his entries under environmental conditions different from those of other competitors. Consistently good or poor performance at Standard tests may be due, in part, to these differences in environment prior to the time the pullets are shipped to the tests.

PRODUCTION SUMMARY OF EACH  
U. S. OFFICIAL EGG LAYING TEST FOR 1961-62

Test	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Per Cent Mortality	Ave. Egg Size Oz./Doz.
Farmingdale (New York)	364	263.10	250.10	7.14	24.60
Missouri	559	252.49	244.39	8.41	25.11
All Tests	923	256.67	246.65	7.91	24.91

PRODUCTION SUMMARIES OF ALL ENTRIES IN U. S.  
OFFICIAL EGG LAYING TESTS FOR 1961-62 BY BREEDS

Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Per Cent Mortality	Ave. Egg Size Oz./Doz.
Barred Plymouth	26	294.05	274.50	0.00	25.21
Rhode Island Reds	52	277.69	259.56	5.77	25.39
Incrossbreds	26	273.41	261.96	11.54	25.41
Crossbreds	208	270.25	255.06	5.77	25.03
White Leghorns	481	260.09	251.93	7.69	24.88
Black Australorps	13	241.07	237.69	0.00	24.65
White Plymouth Rocks	39	228.58	222.77	7.69	24.06
New Hampshire	13	223.55	208.69	7.69	25.78
Columbian Plymouth Rocks	13	185.41	193.08	23.08	23.33
Anconas	52	173.76	172.67	21.15	24.64
All Breeds	923	256.67	246.65	7.91	24.91



ALL TIME HIGH INDIVIDUAL RECORDS FOR EACH BREED IN ALL U. S. STANDARD TESTS  
(BASED ON TOTAL POINTS)

Breed	Year*	Test	Owner	Points	Eggs
S. C. Wh. Leg.	1949-50	West. N. Y.	J. A. Hanson & Son, Corvallis, Ore.	381.35	353
S. C. Wh. Leg.	1956-57	Hunt.	Stern Bros., So. Vineland, N. J.	372.15	347
Bf. Leg.	1942-43	Okla.	Ward's Poul. Fm., Guthrie, Okla.	247.90	241
Bl. Leg.	1949-50	N. J. Hunt.	A. E. Hampton, Pittstown, N. J.	291.40	275
Br. Leg.	1950-51	Texas	Hogan Fms. Hty., Muskogee, Okla.	318.25	294
Exch. Leg.	1933-34	Florida	Harry L. Day, Hudson, S. D.	261.55	265
R. C. Wh. Leg.	1927-28	Missouri	Mrs. W. Cross, Hattie, Mo.	.....	242
R. I. Red	1942-43	West. N. Y.	E. B. Parmenter, Franklin, Mass.	386.10	351
R. C. R. I. Red	1940-41	Texas	Iowa Master Breeders, Sioux Falls, S. D.	314.45	289
R. I. White	1938-39	Texas	Blue Ribbon Fms., Sabetha, Kan.	247.75	225
N. Hamp.	1949-50	Maine	Arnold Whittaker, Stratham, N. J.	374.65	344
N. H. White	1941-42	Missouri	Imperial Br'g. Farm, Ottumwa, Iowa	287.55	265
Bar. P. Rock	1951-52	Conn.	David Cohen, Guilford, Conn.	369.75	338
Wh. P. Rock	1943-44	Florida	Colonial Poul. Fm., Pleasant Hill, Mo.	354.90	326
Col. P. Rock	1951-52	R. I.	Clyde A. Rano, Farley, Mass.	301.70	285
Buff P. Rock	1932-33	N. Y. St.	Far-A-Way Farm, Royfersford, Pa.	254.00	239
Part. Rock	1941-42	Florida	F. G. Romance, Cienaga, Havana, Cuba	157.60	153
R. C. B. Rock	1928-29	Yst. Fm.	Wenger & Miller, S. English, Iowa	.....	142
Ancona	1941-42	Penna.	Raymond Thomas, Saltillo, Pa.	328.40	300
Bl. Aust.	1948-49	Okla.	Watkins Qual. Hty., Vici, Okla.	331.85	313
Bf. Aust.	1935-36	N. Y. St.	Capt. B. Clarke, Hempstead, L. I. N. Y.	201.25	205
W. Wyan.	1931-32	Conn.	Eben Wood, W. Bridgewater, Mass.	333.00	313
S. L. Wyan.	1948-49	Maine	Wellington Wells, Millis, Mass.	280.85	259
Col. Wyan.	1931-32	Florida	S. H. Palmer, Lake Como, Fla.	224.00	231
Buff Wyan.	1930-31	Ala.	Far-A-Way Fm., Royfersford, Pa.	240.05	230
Wh. Min.	1939-40	Texas	T. D. Brown, Tulsa, Okla.	329.20	301
Bl. Min.	1936-37	Texas	E. J. Covey, Everman, Tex.	294.95	278
Bf. Min.	1931-32	N. J. Pass.	Charles Lathrop, Danville, N. J.	277.60	242
J. W. Giant	1949-50	R. I.	Willow Bud Hty., Westerly, R. I.	309.90	299
J. B. Giant	1932-33	R. I.	Sunny Ridge Farm, Kingston, R. I.	266.80	244
Bf. Orp.	1946-47	N. Y. St.	Capt. B. Clarke, Hempstead, L. I. N. Y.	296.50	274
Wh. Orp.	1925-26	N. J. Vine.	J. I. Lyle, Plainfield, N. J.	.....	301
Lamona	1940-41	Conn.	S. E. Raymond, Chardon, Ohio	282.80	265
L. Brahma	1940-41	Texas	Superior Hty., Windsor, Mo.	284.45	270
S. Camp.	1935-36	N. J. Hunt.	Bestcroft, Galra, Ill.	203.05	195
Lac. Barn.	1945-46	N. Y. St.	Walter Dobe, Buffalo, N. Y.	276.40	254
Wh. Barn.	1933-34	Maine	A. D. Arnold, W. Saugerties, N. Y.	236.00	249
Sp. Sussex	1930-31	Texas	R. A. Padgett, Rich Hill, Mo.	208.40	201
Lt. Sussex	1950-51	Maine	Miriam B. Parlin, Englewood, N. J.	308.20	288
Houdan	1930-31	N. J. Pass.	Skyland Farm, Sterlington, N. Y.	215.55	204
Hamburg	1956-57	Okla.	A. M. Stodel, Van Nuys, Calif.	209.20	216
Andalusian	1933-34	N. Y. St.	Walter Dobe, Buffalo, N. Y.	218.00	202
Buttercup	1931-32	Florida	Edward Nowak, Pensacola, Fla.	218.60	225
W. L. R. Corn.	1951-52	Okla.	H. E. Parmenter, Denton, Tex.	131.60	122
Calif. Gray	1951-52	Calif.	York Poul. Br'g. Fm., Modesto, Calif.	291.00	300
Marlboro	1950-51	Georgia	Frederick Wyvill, Upper Marlboro, Md.	280.25	277
Delaware	1950-51	Maine	G. E. Coleman, Brunswick, Me.	293.95	274
W. Lang.	1934-35	Ill.	J. Schafer & Son, Springfield, Ill.	229.70	241
Dominique	1928-29	Maryland	Thurlow Travis, Peekskill, N. Y.	.....	340
Bl. Lang.	1927-28	S. W. Tex.	Nick Weber, Terre Haute, Ind.	.....	203
Kiwi	1928-29	Missouri	W. L. Frank, Sherman, Tex.	.....	180
Crossbred	1955-56	Conn.	J. J. Warren, North Brookfield, Mass.	370.40	342
Incross	1949-50	West. N. Y.	Rucker's Imp. Br'g. Fm., Ottumwa, Iowa	362.85	330

\* Prior to 1950 these records were compiled by the American Poultry Journal. All records from 1950-51 on are based on a test year of 50 weeks. Prior to 1950-51 the records were based on 51 weeks.

ALL TIME HIGH PEN RECORDS FOR EACH BREED IN ALL U. S. STANDARD TESTS  
(BASED ON TOTAL POINTS)

<u>Breed</u>	<u>Year*</u>	<u>Test</u>	<u>Owner</u>	<u>Points</u>	<u>Eggs</u>
S. C. Wh. Leg.	1944-45	West. N. Y.	Babcock Poul. Fm. , Ithaca, N. Y.	4336. 25	4057
Bf. Leg.	1940-41	Okla.	Ward's Poul. Fm. , Guthrie, Okla.	2286. 80	2292
Bl. Leg.	1949-50	N. J. Hunt.	A. E. Hampton, Pittstown, N. J.	2839. 95	2713
Br. Leg.	1952-53	N. J. Hunt.	Charles Kiefer, Toms River, N. J.	2990. 05	2935
Exch. Leg.	1933-34	Fla.	Harry L. Day, Hudson, S. D.	1835. 80	1854
R. C. Wh. Leg.	1927-28	Mo. St.	Amer. R. C. White Leghorn Club	.....	2017
R. I. Red	1948-49	Conn.	J. J. Warren, No. Brookfield, Mass.	4309. 15	3966
R. C. R. I. Red	1940-41	Texas	Ia. Master Breeders, Sioux Falls, S. D.	2635. 50	2514
R. I. White	1935-36	Texas	Blue Ribbon Fm. , Sabetha, Kan.	1962. 85	2152
N. Hamp.	1947-48	West. N. Y.	Hubbard Farms, Walpole, N. H.	3980. 60	3715
N. H. White	1941-42	Missouri	Imperial Br'g. Fm. , Ottumwa, Ia.	2240. 80	2291
Bar. P. Rock	1940-41	Georgia	T. N. Wilcox, Tryon, N. C.	4222. 95	3943
Wh. P. Rock	1952-53	Okla.	Capital Br'g. Fm. , St. Paul, Minn.	3529. 60	3414
Col. P. Rock	1949-50	Florida	Lago Vista, DeLand, Fla.	2740. 95	2904
Bf. P. Rock	1945-46	Missouri	A. Eichelberger, Pekin, Ill.	2321. 40	2208
Part. Rock	1941-42	Florida	F. G. Romance, Cienaga, Havanna, Cuba	1429. 05	1463
R. C. B. Rock	1927-28	Yst. F.	Chas. Staaf, Gladstone, N. J.	.....	314
Ancona	1942-43	Penna.	Raymond Thomas, Saltillo, Pa.	3057. 25	2927
Bl. Aust.	1951-52	Missouri	Berry's Vitality Fm. , Effingham, Kan.	3316. 95	3140
W. Wyan.	1949-50	Calif.	Harvey E. Taylor, Cedar Lake, Ind.	3454. 40	3330
S. L. Wyan.	1948-49	Maine	Wellington Wells, Millis, Mass.	2204. 95	2215
Col. Wyan	1931-32	Florida	S. H. Palmer, Lake Como, Fla.	1764. 65	1840
Buff Wyan.	1930-31	Ala.	Far-A-Way Farm, Royersford, Pa.	1535. 00	1638
Gold Wyan.	1924-25	Mo. St.	J. L. Emrah, Puxico, Mo.	.....	1008
Wh. Min.	1941-42	Texas	T. D. Brown, Tulsa, Okla.	2741. 35	2596
Bl. Min.	1949-50	N. J. Hunt.	Stephen Costa, Minotola, N. J.	2820. 85	2661
Bf. Min.	1945-46	N. Y. St.	Rusk Poul. Fm. , Windsor, Mo.	2205. 25	2268
J. W. Giant	1941-42	Maine	Imperial Br'g. Fm. , Ottumwa, Iowa	2700. 55	2615
J. B. Giant	1931-32	N. J. Pass.	F. V. Dufresne, Reidsville, N. C.	2024. 55	1887
Bf. Orp.	1951-52	Okla.	M. A. Watkins, Nowata, Okla.	3069. 50	2863
Wh. Orp.	1925-26	N. J. Vine.	J. L. Lyle, Plainfield, N. J.	.....	1910
Lamona	1938-39	Conn.	S. E. Raymond, Chardon, Ohio	2190. 50	2056
L. Brahma	1940-41	Texas	Superior Hty. , Windsor, Mo.	2362. 55	2216
S. Camp.	1935-36	N. J. Hunt.	Bestcroft, Galva, Ill.	1744. 40	1723
Lac. Barn.	1942-43	N. Y. St.	Walter Dobe, Buffalo, N. Y.	2426. 25	2343
Wh. Barn	1933-34	Maine	A. D. Arnold, W. Saugerties, N. Y.	703. 00	750
Sp. Sussex	1930-31	Texas	R. A. Padgett, Rich Hill, Mo.	1575. 25	1602
Lt. Sussex	1945-46	Maine	Miriam B. Parlin, Englewood, N. J.	3023. 25	3119
Houdan	1930-31	N. J. Pass.	Skyland Farm, Sterlington, N. Y.	1448. 30	1393
Hamburg	1956-57	Mo.	A. M. Stodel, VanNuys, Calif.	2017. 30	2084
Andalusian	1934-35	N. Y. St.	Walter Dobe, Buffalo, N. Y.	1424. 15	1357
Buttercup	1931-32	Florida	D. C. Gilles, Tallahassee, Fla.	1366. 30	1393
W. L. R. Corn.	1951-52	Okla.	H. E. Parmenter, Denton, Tex.	1248. 10	1360
Calif. Gray	1952-53	Okla.	Dryden Poul. Br'g. Fm., Modesto, Calif.	3038. 10	3003
Marlboro	1950-51	Georgia	Frederick Wyvill, Upper Marlboro, Md.	2722. 25	2587
Delaware	1950-51	Maine	G. E. Coleman, Brunswick, Me.	3001. 40	2954
W. Lang.	1927-28	Mo. St.	Virginia Kreigh, Mexico, Mo.	.....	1937
Dominique	1928-29	Maryland	Thurlow Travis, Peekskill, N. Y.	.....	1702
Bl. Lang.	1927-28	S. W. Tex.	BlackLangshan Club of America	.....	1565
Kiwi	1927-28	Georgia	C. I. Cowden, Atlanta, Ga.	.....	1352
R. P. Game	1929-30	Penna.	New Penna. Game Club	.....	1176
W. Cornish	1929-30	Penna.	H. H. Landis, Telford, Pa.	.....	1142
Rhinelander	1926-27	Illinois	F. A. Banderob, Huntley, Mont.	.....	440
Crossbred	1958-59	Conn.	J. J. Warren, NorthBrookfield, Mass.	4184. 35	3900
Incross	1952-53	Florida	Blanton Smith, Nashville, Tenn.	3948. 30	3756

\*Prior to 1950-51 all records were based on 51 weeks. Since 1950-51 the test year has been 50 weeks.

AVERAGE ANNUAL PRODUCTION AND MORTALITY OF BIRDS ENTERED IN THE  
STANDARD EGG LAYING TESTS OF THE UNITED STATES FOR THE  
THREE YEAR PERIOD ENDING SEPTEMBER 15, 1962

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Per Cent Mortality	Ave. Egg Size Oz. /Doz.
Albermarle Acres, Unadilla, N. Y.	WL	78	251.29	242.18	7.7	24.73
Bagby Poultry Farm Sedalia, Mo.	WL	78	264.67	254.04	5.1	25.88
Cashman Leghorn Farm Webster, Ky.	WL	260	272.70	267.32	5.0	24.84
Dirkse, R. Zeeland, Michigan	WL	182	250.57	244.00	9.3	25.53
Drake, John W. Skilman, N. J.	WL	39	275.95	263.90	7.7	24.86
Eby's Poultry Farm Carrolton, Texas	WL	78	268.15	260.09	3.9	24.79
Foreman Poultry Farm Lowell, Michigan	WL	195	248.41	244.84	9.7	24.56
Hendrickson, H. F. & R. G. Bridgehampton, N. Y.	WL	39	249.08	234.13	5.1	25.40
Midwest Poultry Farm Marshall, Mo.	WL	78	258.35	245.12	7.7	26.11
Missouri Valley Hatchery Marshall, Mo.	WL	78	251.96	242.26	5.1	25.64
Shaver Poultry Farm Galt, Ontario, Canada	WL	195	268.81	260.45	6.2	25.28
Harco Orchards So. Easton, Mass.	RIR	182	287.28	265.94	6.0	26.31
Harco Orchards So. Easton, Mass.	BPR	156	290.94	271.16	4.5	26.26
Botkin Poultry Farm Berea, Ky.	WPR	91	232.22	227.13	7.7	24.59
Lee's Poultry Farm Brookville, Ohio	WPR	39	221.70	211.72	5.1	24.90
Anderson, Ralph W. Hanover, Mass.	Cr.	78	266.87	247.50	2.6	25.66
Harco Orchards So. Easton, Mass.	Cr.	260	288.76	267.64	5.4	25.96
Parks Poultry Farm Altoona, Pa.	Cr.	182	265.06	255.05	7.7	25.29
Colonial Poultry Farm Pleasant Hill, Mo.	Inc.	130	255.27	244.32	13.8	26.00
Reynolds, Mrs. Ruth O. Indianapolis, Ind.	Col. P.R.	39	169.95	178.13	23.1	23.60

AVERAGE ANNUAL PRODUCTION AND MORTALITY OF BIRDS ENTERED IN THE  
STANDARD EGG LAYING TESTS OF THE UNITED STATES FOR THE  
TEN YEAR PERIOD ENDING SEPTEMBER 15, 1962

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Per Cent Mortality	Ave. Egg Size Oz. /Doz.
Bagby Poultry Farm Sedalia, Mo.	WL	221	252.04	238.04	7.2	25.52
Cashman's Leghorn Farm Webster, Ky.	WL	1027	263.34	252.12	7.3	25.30
Dirkse, R. Zeeland, Michigan	WL	947	246.74	239.34	7.4	25.08
Drake, John W. Skilman, N. J.	WL	143	274.55	265.19	7.0	24.81
Foreman Poultry Farm Lowell, Michigan	WL	1352	257.89	247.43	10.4	25.22
Hendrickson, H. F. & R. G. Bridgehampton, N. Y.	WL	130	240.26	228.88	7.7	25.03
Missouri Valley Hatchery Marshall, Mo.	WL	286	252.63	243.29	6.6	25.47
Harco Orchards South Easton, Mass.	RIR	663	280.73	261.57	10.0	26.28
Harco Orchards South Easton, Mass.	BPR	585	273.47	260.45	5.6	25.70
Lee's Poultry Farm Brookville, Ohio	WPR	221	221.57	218.09	8.1	24.85





